



ESTABLISHED 1859.

CHIEF OFFICES: 42 CANNON STREET, LONDON, E.C.
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 SYDNEY, N.S.W.

As an Official Journal THE CHEMIST AND DRUGGIST is
 regularly supplied to every member of
EIGHT PHARMACEUTICAL SOCIETIES
 in the British Empire.

CONTENTS: Vol. XLVIII. No. 19.

PAGE	PAGE
An Assistants' Night Out..... 656	French News 650
Bankruptcy Reports 659	Gazette 661
Business Changes 668	In Silk and Colours 669
Carriage of Liquids by Sample- post..... 665	Irish News 649
Correspondence:—	Legal Reports 657
Testing Oil of Lemon; Malt	Marriages 651
Extract; Sticky Fly-papers;	Mineral-water Trade..... 669
Anti-cutting, &c. 677	New Companies and Company
Miscellaneous Inquiries..... 678	News 667
Deaths 651	Next Week 680
Dead of Arrangement 661	Personalities 672
Editorial Comments:—	Pharmaceutical Society of Great
On the Wrong Side..... 662	Britain:—
Brokers and Arbitrations.... 663	Council Meeting 652
Combining or Conspiring.... 664	Annual Report..... 653
Herbert Spencer on the	Financial Statement..... 655
Metric System; Ammo-	Proprietary Articles Trade
niated Mercury; Shops	Association .. 670
(Early-closing) Bill 665	Royal Society <i>Conversazione</i> .. 666
English News 648	Scotch News..... 650
Foreign and Colonial News.... 651	Trade Notes 661
	Trade Reports 673

AMERICAN BUSINESS.

OUR annual issue to the best business houses in the whole-sale and retail drug-trade of Canada, the United States, Mexico, and West Indies will be on May 23. It will be a good number to make an exceptional advertisement display in, and we ask all our regular advertisers to make a note of the date—May 23. Space should be secured from the publisher long before that, of course. The number is an excellent business one, and, being addressed to those who are Great Britain's best customers, telling advertisements should bring in a quick response.

PHARMACEUTICAL COUNCIL ELECTION.

NAME on a postcard whom you think will be the first three and the last three candidates on the poll. A guinea for the prophet who gets nearest to the actual result. In the event of more than one correct vaticination, the Editor may divide or duplicate the prize as he thinks fit. Cards must be sent in before May 18.

The names of the candidates are:—Armitage, Bateson Campkin, Carteighe, Corder, Cross, Gostling, Harrison, Hills, Johnston, Martindale, Newsholme, Park, Savory, Storrar, Symes, Warren, Wills.

Summary.

WE give particulars in an Editorial note regarding the enormous increase in South African trade during recent years (p. 651).

The possibility of making a silk-like fibre from collodion has been demonstrated, and it is proposed to start a factory at Manchester (p. 669).

AN Austrian pharmacist points out that white precipitate of full mercurial strength is not obtainable owing to its affinity for moisture (p. 665).

IN connection with the anti-cutting movement meetings have been held at Edinburgh, Leeds, and Bradford, reports of which are printed on p. 670.

IT appears, from observations on the spot by our Paris correspondent, that the season trade in the South of France has been poor this year (p. 650).

MR. H. GARNETT writes, in reply to Mr. J. C. Umney regarding the assay of lemon oil, maintaining the general correctness of his method (p. 677).

A CLAIM in respect to some carbonate of soda, before Mr. Commissioner Kerr, brings out a romantic history, somewhat of an Enoch Arden character (p. 658).

THE Companies Bill has been referred to a Select Committee. Lord Herschell has taken charge of an amendment which covers the interests of chemists (p. 648).

THE National Alliance of Mineral-water Associations which supervises the interests of those in the aerated-beverages industry, held its annual meeting in London last week (p. 669).

WE report a case under the Sale of Food and Drugs Act in which a retailer was summoned for selling deficient spirit of nitrous ether. The defence that it was sold as sweet nitre was successful (p. 659).

THE London Chemists' Assistants' Association finished up the work of their session by visiting Idris's aerated-water factory, Mr. Idris, on that occasion, telling them how aerated-waters are made (p. 656).

THE annual report and financial statement of the Pharmaceutical Society of Great Britain show a deficit on the year's working of nearly 4,000% (p. 653), upon the circumstances of which we comment (p. 662).

WE report the formation of an unusual number of new companies, some of them formed for the purpose of trading as retail druggists. Appended to this are notes in respect to the progress of established companies (p. 667).

THE Pharmaceutical Council met on Wednesday and transacted routine business; also elected three honorary members—Professor Balfour (Edinburgh), Dr. T. E. Thorpe (London), and Professor Tschirch (Berne)—and two corresponding members (p. 652).

A MEETING was held at the Chamber of Commerce, on Tuesday, of the Chemical Section to consider what steps should be taken to induce the Post Office to offer similar facilities for the carriage of liquids by sample-post as are given to traders in foreign countries (p. 635).

At the Royal Society's *conversazione* on Wednesday evening photography and Röntgenography were in strongest evidence. An invention was exhibited by which small capsules of liquefied carbonic-acid gas are used for making soda-water by fitting to an ordinary bottle (p. 666).

A DISPUTE in regard to the sale of a chemist's business at Hampstead has been fought out in the High Court (p. 657). In another case, heard in the Chancery Division, a chemist has obtained an order against the Trust Agency to complete a contract entered into to purchase plaintiff's business (p. 664).

EXAMINATIONS in bankruptcy are reported of J. Warren (of Boscombe), H. Forster (Preston), J. Parkinson (Cowan), H. Marks (Bishopsgate), and R. W. Morris (Edinburgh). In one of these cases the error of buying a business without properly ascertaining its value is shown; while in another report the history to date of a gout-cure is recorded (p. 680).



English News

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

Society of Chemical Industry.

It has now been arranged to hold the annual meeting of this Society in the hall of the Carpenters' Company, London Wall. The building is at the north end of Throgmorton Avenue, behind the Drapers' Hall, where the last London annual meeting was held.

Royal Institution.

The annual meeting was held on May 1, Sir James Crichton-Browne presiding. The annual report stated that the real and funded property of the Institution now amounts to above 100,000*l.*, entirely derived from the contributions and donations of the members and of others appreciating the value of the work of the Institution. Seventy-two new members were elected in 1895.

Boots' Response.

Consequent on the recent action brought against them by the Pharmaceutical Society for not exhibiting the title of their company on their Clifton shop (reported by us last week), Boots' Pure Drug Company (Limited) are advertising as follows in the Bristol papers:—"All Bristol should rush to see the handsome tablet with our name on the door of our shop at 13 Queen's Road, Bristol. It has been up put by special request. Our business opponents, the chemists of Bristol, being largely interested in a Society which has taken a keen and not unkindly interest in us, are unwilling that the public should not see our name on the front door. Here it is—Boots' Pure Drug Company (Limited), largest, best, and cheapest retail chemists in the world, managed by two chemists qualified by Pharmaceutical Society's examination. Drugs of the best quality. Assistants of the highest qualifications. Prices of the most economical. 13 Queen's Road, Clifton."

Strange Charge of Robbery at a Chemist's.

Before Mr. Curtis Bennett, at the Marylebone Police Court on Friday, May 2, Elwyn Barron (46), described as an actor, living at Queen Street, Edgware Road, was charged with being concerned with his daughter, aged six years, in stealing 2*l.*, the money of Richard Dodd, chemist, of 146 Edgware Road. The evidence was that late on Thursday night the prisoner entered the prosecutor's shop with his daughter and made a small purchase. Instead of leaving the shop he kept up a long conversation with the manager, who, meanwhile, went behind the dispensing-counter and continued his work. This went on for about half an hour, when the manager overheard footsteps behind the counter running at right angles with the one at which he was standing. He hurried round to ascertain who it was, when, upon reaching the counter he found the prisoner confronting him. Pushing him aside he saw the little girl standing before the open till with her hand in the bowl where the gold was kept. Before he had time to ascertain whether anything was missing the girl ran out of the shop followed by the prisoner, who, as he sauntered out, calmly inquired whether the girl had taken anything. The manager examined the till and found that 2*l.* had been stolen. He sent the errand-boy after the prisoner, but the boy lost sight of him, and did not see him again until the next morning, when he gave him into the custody of Police-constable Lawson, 348 D. At the police-station the prisoner said that all that was taken from the till was two pennies. He was asked to produce what money he had, and took out 4*s.* 1*d.*; but when he was searched a further sum of 1*l.* 9*s.* was found upon him. His lodgings at Queen Street were then visited, and the little girl was found there locked up in a back room. At this point the prisoner, who said he was a

foreigner and had no friends in this country, was remanded, and his daughter was sent to the workhouse.

The Chemists' Club.

A smoking concert is announced to take place at the Clubroom, Farringdon Avenue, on Thursday next, May 12, to commence at 8 P.M. All members are cordially invited. Chemists who are not members will be admitted on production of their business-card.

L.C.C. Chemical Department.

The following is the estimate of the Chemical Department for 1896-7, agreed to at the weekly meeting of the London County Council on Tuesday:—The chemist, 800*l.*; two principal assistants at 350*l.* (700*l.*); two assistants (first-class) at 300*l.* and 230*l.* (530*l.*); four second-class assistants, ranging from 162*l.* 10*s.* to 200*l.* (712*l.* 10*s.*); one fourth-class assistant, 95*l.*; one assistant at 3*l.* (159*l.*); one messenger at 1*l.* 2*s.* 6*d.* (59*l.* 13*s.*); one laboratory attendant at 18*s.* (47*l.* 14*s.*); total, 3,103*l.* 17*s.* This shows an increase over 1895-6 of 245*l.*

Chemical Supplies of the L.C.C.

At the weekly meeting of the London County Council, held at the County Hall, Spring Gardens, on Tuesday, the Main Drainage Committee submitted their estimate of chemicals required for use during the year 1896-7, made up as follows:—Barking outfall, 14 600 tons of lime, at 12*s.* 5*d.* per ton (including 600 tons for proposed liquor treatment), 9,065*l.*; 3,300 tons of iron sulphate, at 18*s.* 8½*d.* per ton (including 300 tons for liquor treatment), 3,090*l.*; total, 12,155*l.* Crossness outfall, 9,000 tons of lime, at 12*s.* per ton, 5,400*l.*; 2,250 tons of iron, at 18*s.* 8½*d.* per ton, 2,105*l.*; total, 7,505*l.* It was not proposed to make any provision for deodorising for the year 1886-7; but there was a stock of chemicals at the outfalls and at Deptford, as follows:—Manganate of soda: 90 tons at Barking, 132 tons at Crossness, and 22 tons at Deptford. There were also 10 tons of sulphuric acid in stock. The estimates were agreed to. The estimate of 175*l.* each for the chemists at the two outfall-works was also passed.

The Midland Chemists' Assistants' Association.

The last social evening of the session was held on Wednesday, April 29, at Exchange Rooms, Birmingham. Between forty and fifty were present, and the performance was much appreciated. The instrumental portion of the programme was provided by Messrs. Woodward (piano) and Duncuff (cello); recitations were given by Mr. H. Martin; and songs were rendered by Messrs. Lidbury, Lloyd, Osborne, Walton, Jones, Cornish, and others.

The Association held its first annual meeting on Wednesday night at the Exchange Rooms, Birmingham, Mr. T. C. Clarke (President) in the chair. The honorary secretary (Mr. W. Bindloss) submitted the report, which stated that sixty-two members had been enrolled, including nine honorary members, and twenty-one meetings had been held. The report was adopted. After the election of the committee the President delivered a valedictory address, in which he called attention to the valuable papers that had been read during the session, and said that on the social side they had been most successful. Although the finances were not as flourishing as they might wish, they were in a good position in view of the fact that this was the first year of their existence. Several votes of thanks were passed. The committee elected consisted of Messrs. Clarke, Bindloss, Selby, Lawton, Jessop, Williams, Meggison, Boucher, Foster, Bland, Shorthouse, Osborne, Casson, and Featherstone.

The Companies Bill.

In the House of Lords on Monday, on the motion for going into Committee on the Companies Bill, Lord Leven and Melville moved that it should be referred to a Select Committee. The Earl of Dudley, on behalf of the Government, expressed his willingness to take that course. After a brief discussion the amendment was agreed to, and the Bill was referred to a Select Committee.

Lord Herschell has given notice of an amendment to the Bill by the addition of the following clause, which is drafted

with the view of preventing the assumption of personally-protected duties by limited companies:—

No company shall be registered under a name which shall include or consist of a name, title, sign, description, or addition which cannot by law be taken, used, or exhibited by a natural person, unless such person has a personal qualification.

If any company shall take, use, or exhibit any name, title, sign, description, or addition which cannot by law be taken, used, or exhibited unless the person taking, using, or exhibiting the same has a personal qualification, such company shall (1) be deemed to be carrying on business for an illegal purpose within the meaning of this Act, and shall (2) be subject to the same consequences in all respects as though the company were a natural person taking, using, or exhibiting such name, title, sign, description, or addition without having such qualification.

No petition for the winding-up of a company on the ground that it is carrying on business for an illegal purpose within this section may be presented except by or with the authority of a society or association empowered or entitled by Act of Parliament, Royal charter, or letters patent to grant, confer, or inquire into the qualification entitling any person so taking, using, or exhibiting such name, title, sign, description, or addition as aforesaid.

This clause would fully meet the reasonable demands of chemists, dentists, and medical practitioners. There is not much prospect, however, of the Bill getting through Parliament this session.

Fatal Accident in Chemical-works.—Compensation.

At the Northwich County Court on Wednesday, a jury awarded 300*l.* to Catherine Heyes, who claimed compensation from the Cheshire Alkali Company, Middlewich, for the loss of her husband. The deceased was a stillman at the works, and met with his death by falling into a chlorine well, which, it was held, was not protected as required by the Board of Trade. The case occupied ten hours.

Plymouth and District Junior Chemists' Association.

An interesting lecture on "Cell-structure in Plants" was given by Mr. J. D. Turney before the members of the above at the Foresters' Hall on April 30. The lecture was illustrated by lantern-slides. On Wednesday, May 6, the first botanical excursion in connection with the Association took place, the party, under the leadership of Mr. O. A. Reade, of the R.N. Hospital, journeying to Plym Bridge, where several specimens indigenous to the neighbourhood were collected.

Bottle-manufacturers in Conference.

When the Factory Bill was before Parliament last year, firms engaged in the glass industry throughout the country combined for the purpose of obtaining certain alterations which were deemed necessary for the protection of their trade. The plate and sheet glass manufacturers have recently paid their share of the expense which the placing of their views before Parliament entailed, and on Monday last the glass-bottle manufacturers held a meeting at the Queen's Hotel, Leeds, for the purpose of considering the best means of meeting their proportion of the costs, and for the discussion of other matters. Mr. J. Candish (Sunderland) presided, and there were also present Messrs. W. Bagley (Knottingley), John Wilkinson (South Yorkshire), W. Breffit (Castleford), Brook (Leeds), Barron Kilner (Wakefield), George Kilner (Thornhill Lees), Caleb Kilner (Conisborough), A. Barron (Barnsley), J. Dobson (Leeds), Firth (Dewsbury), T. L. Brown (Mexborough), Redfern (Barnsley), J. Wright (Birmingham), and Mr. Eldridge, solicitor (Wakefield). In the course of conversation satisfaction was expressed at the results which accrued from the opposition to the Bill on the part of the glass industry, and it was decided to make a levy on the glass-bottle manufacturers to complete the sum due for costs. A vote of thanks was unanimously passed to the representatives of the employes for the assistance they rendered in obtaining the necessary alterations in the Bill. The question of forming a general federation for the glass-bottle industry was discussed, but the matter was eventually postponed.

MR. PEGG LONG: "A basket of patent medicines! What on earth did you get 'em for?" Mrs. Doser's boy: "Mum's going to take 'em. She wants to git her picture in the papers."



Drug-contracts.

Messrs. P. A. Leslie & Co., chemists, Dublin, have been appointed contractors to the Boyle, Westport, and Ballinrode Unions for the supply of drugs, medicines, surgical and medical appliances to the workhouse and five dispensaries; Mr. W. J. Hartnett, chemist, Castlereagh, has been appointed to the Castlereagh Union; and Messrs. Clark & Co. (Limited), wholesale chemists, Belfast, to the Ballyshannon Board of Guardians.

Dispute Settled.

The dispute between Messrs. Goulding and their employes, reported last week, has since been satisfactorily settled.

Contractors Should not Criticise Guardians.

The Dromore West Board of Guardians at their last meeting discussed the medicine-contract. The committee recommended that the contract should be divided between Mr. Boyers (Sligo) and Mr. Adamson (Ballina), whose quotations were about equal. They reported that a tender which appeared to be lower had also been sent in by Mr. White, of Sligo, but they recommended that his tender be not accepted on the ground that Mr. White had complained that the committee last year did not give him fair play. The committee resented that remark, and proposed that the Board should indicate their opinion of it by refusing to consider Mr. White's tender this year. The Board supported the committee's view by ten votes to five.

In Bankruptcy.

In the Court of Bankruptcy, Dublin, last week, Mr. Boyd, chairman of Messrs. Boileau & Boyd (Limited), chemists, Bride Street, was appointed creditors' assignee in the bankruptcy of John Darcy, chemist and druggist, Dublin.

The Sale of Methylated Spirit.

At the Dublin Police Court, on Wednesday, the remanded case was heard in which the Commissioners of Inland Revenue prosecuted Mr. John Garrard, chemist and druggist, North Strand, with having sold, on February 10 and 15 last, pure methylated spirit under the name of "finish," he not being licensed to sell such spirit. Defendant pleaded that he sold the stuff, as he had bought it, as "finish." He thought he ought not to be fined because he did not himself make an analysis of the spirit. Mr. Byrne, Q.C., said he was obliged to impose a fine not exceeding 50*l.* He would only inflict a penalty of 12*l.* 10*s.* on the defendant, who might appeal to the authorities for a further reduction of that amount. [The defendant's name does not appear on any of the Irish registers.]

Imperfect Sealing of Samples.

In a case heard at Dublin last week, in which the defendant was charged with violating the Food and Drugs Act, Professor Tichborne, pharmacist and apothecary, complained of the imperfect sealing by the Corporation Inspector of the sample left with him for analysis. He declined to examine the sample, as he had been able to remove the cork from the bottle without breaking the seal. Sir Charles Cameron agreed with Professor Tichborne, and said the sample should be sealed with wax, not merely on the cork, but over the glass at the mouth of the bottle. Both of them had been made the victims of parties tampering with samples.

DIGESTIVE FERMENTS AND ALCOHOL.—According to Dastie (*Comptes Rendus*) trypsin is soluble in alcoholic liquids up to 55 per cent. strength, and the amylolytic ferment is still more soluble, a clear solution being obtainable with 65 per cent. alcohol.



Scotch News

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

Edinburgh Chemists' Excursion.

At a meeting of the Edinburgh and District Chemists' Trade Association held last Friday, Mr. David McLaren, convener of the Excursion Committee, reported that Mr. R. L. Hendry, Mr. Bowman, and himself had gone over a route which he had confidence in submitting for approval as the route for their annual excursion. It was to take train to Craigendoran, steamer from there to Arrachar, walk or 'bus to Tarbet, leave there at 4 P.M. for Balloch, and home from there by train. He said their past excursions had been successful, and he believed this one might be more so than any that had gone before. June 17 was fixed as the date of the excursion, and the arrangements were remitted to the committee.

Glasgow Parish Medicines.

At the monthly meeting of the Glasgow City Parish Council, on May 5, the following four offers for the supply of medicines to the dispensary were submitted:—Messrs. Brown Brothers & Co., 43*l*. 1*s*. 7*d*.; Mr. James Taylor, 43*l*. 3*s*. 6*d*.; Glasgow Apothecaries' Company, 44*l*. 5*s*. 3½*d*.; Messrs. W. & R. Hatrick & Co., 45*l*. 5*s*. 2*d*. Messrs. Brown Brothers & Co.'s offer, being the lowest, was accepted. The Medical Committee reported having made purchases of cotton-lint and boracic lint (McFarlane's), from Mr. James Taylor, at 11½*d*. per lb. in both cases. The Medical Committee reported that the inspector had written Dr. Fortune for an explanation as to prescribing proprietary medicines, and that a reply had been received to the effect that he had been under the impression that the Council's recommendation to its medical officers not to prescribe proprietary medicines was not intended to be absolute, or he would not have prescribed them. The committee were satisfied with the explanation. An application by Mr. J. M. Halley, principal apothecary to the Council, for an increase to his salary was reported to have been made to the Medical Committee, which deferred consideration of it for two months, in view of the Poor-law Officers' Superannuation Bill now before Parliament.

French News.

(From our Paris Correspondent.)

PRACTICAL CHEMISTRY.—The French Minister of Public Instruction has decided to inaugurate a professorship of practical chemistry at the Paris Faculty of Sciences on November 1 next. Professor Friedel, member of the Institute, will have charge of it.

THE CO-OPERATIVE MANUFACTURE OF IODIDES has not yet reached a practical working-stage, though, by a circular issued by the directors, the shareholders are informed that the "greatest possible activity is now being used to compensate for the time lost during the inclement winter weather." The principal building of the manufactory is now ready, and the installation of the necessary apparatus has commenced. It is intended that the pharmacists co-operative manufacture of iodides will be an accomplished fact early in July next.

A TECHNICAL COMMITTEE.—In the name of the Syndicate of Pharmacists of the Seine, M. Rièthe intends to advocate, at the next meeting of the General Association of French Pharmacists, the formation of a technical committee, to be chosen by that body from professors of the Paris and provincial schools of pharmacy, to act as disciplinary committees charged with controlling the loyal exercise of

pharmacy. At present such a committee, M. Rièthe argues, would become a superior Council of Pharmacy, arbitrating on disciplinary questions, and its action could be developed with good effect to cover a number of professional subjects. The idea of such a technical committee has been favourably received by the General Association.

AN ASSISTANTS' GENERAL ASSOCIATION.—The proposed formation of a general association of assistant pharmacists of France and the colonies is announced, with headquarters at Paris. A committee of assistants has been studying the subject since November, 1895, and is now desirous of finding how far the support of pharmacists and druggists in business can be relied upon. An essential point in the ideas of the promoters is that it can only come into existence when they can count upon 4 000 pharmacists and druggists as honorary members. The committee has published a *résumé* of the proposed statutes with a view to finding out how far the support of employers can be relied on. The object of the Association would be (1) to establish friendly relations amongst assistants; (2) to act as an intermediary in obtaining situations; (3) to form a mutual help society which would include a relief fund, insurance against dispensing accidents, a pension fund, indemnity to widows and children, &c. The membership is to consist of assistants as active members, and pharmacists in business, who will be honorary members. A minimum subscription of 20*f*. per annum, with extra payment to the various funds, is suggested. The Association proposes to make itself responsible for its active members, who will be required to inform the secretary before leaving a situation, and to state reasons for changing. The honorary members are to undertake to engage assistants only through the Association. The management will be placed in the hands of a committee composed of six honorary members (pharmacists) and three active members (assistants). Any assistant infringing the rules of the Association will be liable to be expelled.

PHARMACY IN THE SOUTH OF FRANCE.—A representative of the *C. & D.* who visited the Riviera a few days ago found that the season at Cannes has been very quiet this year. One French pharmacy in the Rue de Fréjus has its shutters up and is marked "To Let." A resident of long standing expressed the opinion that the English occupation of Egypt continues to attract visitors who formerly frequented the South of France. At Nice the pharmacists say they have never known the season to be so good, though Mr. Nicholls (Nicholls & Passeron) expressed the opinion that from the purely pharmaceutical point of view there had been little to be thankful for. Mr. Nicholls is the only English registered chemist in business on his own account at Nice, though there are a number of "British Pharmacies" and "American Druggists" with English assistants. He is an old and respected resident of the town, and takes a prominent part in the British Chamber of Commerce there. He finds that the visitors at the hotels are the best customers, the people occupying villas appearing generally to patronise the discount pharmacies. Mr. Nicholls was appointed chemist to the Queen last year. At Montpellier the *C. & D.* representative attended an entertainment given by the Students' Association there, which consists mainly of medical and pharmaceutical students. A special attraction was a lively burlesque, the principal personage being a doctor of medicine made up as Rabelais. Four new marble busts have recently been placed in the quadrangle of the Montpellier School of Pharmacy. They are: J. E. Bérard (1789–1869); C. F. Gerhardt (1822–1890); J. H. Balard (1802–1876); and Professor J. L. Planchon (brother of the Director of the Paris School of Pharmacy and father of Louis Planchon, professor at Montpellier). In the course of an interesting conversation, M. Gay, professor at the School of Pharmacy, told the *C. & D.* representative a number of interesting anecdotes connected with the history of pharmacy in connection with the ancient University of Montpellier, which recently celebrated its sixth anniversary.

WHOSE AD. DID HE READ?—Farmer: "That was a good number of the *Tooter* you got out last week." Country Editor: "I am glad to hear that you were pleased with it." Farmer: "Them stories you had in about them fellers bein' cured of long-standin' diseases were the entertainin' bits of news I've read for a long while."

Foreign and Colonial News.

A NEW EDITION OF THE MEXICAN PHARMACOPEIA will be published shortly. The Mexican Pharmaceutical Society's Committee have been working on the matter some time. This is the fourth edition of the Pharmacopeia. The first appeared in 1846, the second in 1874, a third in 1884, and a supplement in 1890.

PHILADELPHIA GRADUATES—The completion of three-quarters of a century's existence of the Philadelphia College of Pharmacy was marked by the largest graduation in the history of the college. On April 15 no fewer than 201 students received their diplomas. Amongst them were many girls. The United Kingdom contributed the odd graduate—James Craig, a native of Scotland.

PHARMACY IN GUATEMALA—The Central American Republic of Guatemala, with 1,460,000 inhabitants, of whom two-thirds are Indians, has facilities for medicine and pharmacy at each of its two Universities: Guatemala City and Quetzaltenango. The first-named city has one of the best-organised infirmaries in Spanish America. This hospital is supported by a liberal contribution from the Government and by voluntary subscriptions and donations. In 1894 7,403 persons were admitted to the free wards. The mortality amongst them was $6\frac{3}{4}$ per cent.

SYRUP OF FIGS.—Some time ago we mentioned a case in which the California Fig Syrup Company proceeded against Fredk. Stearns & Co., of Detroit, in respect to the infringement of their rights, the Detroit firm having sold a laxative syrup of figs of their own. The case went against the plaintiffs, who appealed, and decision in the appeal has been given by Judge Tafts, of the U.S. Circuit Court of Appeal at Cincinnati. This supports the previous judgment. The Judge said that the term "syrup of figs" might be used by anybody, but if it were made apparent that the defendants sought by unfair means to palm their article off as that made by plaintiffs, such unfair competition could be enjoined. However, plaintiffs were not entitled to relief because, in effect, their article was not in strict accordance with the description.

BRITISH TRADE WITH EGYPT.—It has been decided to form a British Chamber of Commerce for Egypt, with its seat at Alexandria. Membership will be limited to British subjects. It has always been a sore point amongst the British community in Egypt that so many British houses are represented there by foreign agents, while there is no single instance in which a foreign company is represented in Egypt by a Britisher, with the exception of the Imperial Ottoman Bank. Where foreign houses or companies were in the past represented in Egypt by Britishers no stone was left unturned to oust them out of their posts. The attention of British traders is called to the necessity of furnishing articles strictly in accordance with the specifications when they make tenders for Egyptian contracts. Many contracts have gone past English firms on this account. The prospective opening of the Soudan is likely to give a great impetus to Egyptian trade. Hitherto the United Kingdom has not had her fair share of what is going, and in many cases this has been the fault of the foreign agents.

THE BACILLUS OF SOUTH AFRICAN HORSE-SICKNESS—The Director of the Bacteriological Institute of Cape Colony (Dr. Edington) has just issued his report for 1895, in which he states that the two diseases which have mainly occupied his attention in the department of scientific investigation were those of horse-sickness and liver-sickness in calves. With regard to the former, which is one of the principal obstacles to the development of large tracts of Southern and South-Central Africa, Dr. Edington has not progressed much. He has succeeded in cultivating the mycelium, but only in a very partial manner, the substance having failed to grow freely in any medium experimented with. The isolation of the pure microbe in a state admitting of its use for attenuation experiments is, therefore, apparently as far off as ever, and Dr. Edington can only guess that the parasitic growth requires conditions which are not at present understood. Numerous experiments have been made in order to determine the natural habitat of the parasite which

seems to be the cause of the malady, and it has been found that the natural gum which exudes from an at present undefined species of mimosa is prolific in mycelia and vegetative spores morphologically identical with bodies present in the blood of animals suffering from horse-sickness. "Should it be proved," continues Dr. Edington, "that the parasite of horse-sickness is afforded a resting-place for its spores during a season when it would otherwise be destroyed by atmospheric influences, it must be evident that for the prevention of this disease in its epidemic form the best means would be found in a destruction of such resting-place." An analogy to this idea has been already found in the case of one of the "rusts" in grain, of which the resting-spore required a winter shelter on the leaf of the barberry, on which the initiatory growth of the next season took place. The destruction of the barberry-bushes in the neighbourhood of the cornfields put an end to the "rust." Dr. Edington, however, has prepared an immunising medium (of which no precise particulars are given), with which he has vaccinated an experimental batch of nineteen horses recently despatched to the fly-infested districts of Mashonaland. These horses will be subjected to severe tests, and, should they successfully withstand those, Dr. Edington hopes that before the end of the present year a satisfactory vaccine for horses will be available for use by farmers.

Marriages.

LOFTHOUSE—MOORE.—On April 30, at St. James's Church Hall, by the vicar (brother of the bride), assisted by the Rev. G. W. Clapham, vicar of St. Matthias, Sheffield (uncle of the bridegroom), and Rev. B. Radcliffe, James William Lofthouse, of the firm of Lofthouse & Saltmer, wholesale druggists, to Catherine Sarah Reid Moore, both of Hull.

ROACH—REDWOOD.—On May 5, at St. Mary's, Finchley, by the Rev. S. B. Mayall, vicar of St. Paul's, Finchley, the Rev. W. Griffiths Roach, of Llantwit Major, Glamorganshire, only son of John Roach, of Solva, Pembrokeshire, to Charlotte Elizabeth Morson (Bessie) Redwood, younger daughter of the late Professor Theophilus Redwood, Ph.D., of Boverton, Glamorganshire.

Deaths.

HUTTON.—At 8 Bath Street, Portobello, near Edinburgh, on April 26, Mr. William Hutton, chemist and druggist. Aged 40. The funeral took place on Friday, May 1, and was attended by the Chairman and Secretary of the North British Branch, amongst other local chemists. Mr. Hutton was for many years principal assistant in Duncan, Flockhart & Co.'s Princes Street Pharmacy, and was afterwards in business in Portobello.

MOORE.—On April 25, at Walton-on-the-Naze, George Brass Moore, chemist and druggist, formerly of Southport and Cheadle, Staffs.

WARRIOR.—On April 30, at Northallerton, Mr. Wm. Warrior, chemist and druggist. Aged 78. Mr. Warrior had been in business at Northallerton for over half a century, and retired a few years ago.

YORATH.—Mr. Alderman T. V. Yorath, formerly a chemist and druggist in Cardiff, died at his residence in Plastnron Avenue, Cardiff, on Saturday night last, May 2, from an acute attack of bronchitis, in the 60th year of his age. Deceased was originally apprenticed to his father, who was a cooper in Quay Street, but the work not being altogether congenial, soon after he had completed his apprenticeship he entered the service of his brother, Mr. Howell Yorath, chemist and druggist, in Cowbridge Road, Canton. On the death of his brother he succeeded to the business, and subsequently took into partnership a practical chemist and opened a branch shop in James Street, near the Docks. This business, however, was not very prosperous, and, after two or three years, Mr. Yorath abandoned it and dissolved the partnership. He afterwards added to his Canton business that of postal work, and taking an adjoining shop went into the ironmongery trade. A year or two ago he disposed of the business to Messrs. Hicks & Co., and retired into private life. He took a prominent part in public affairs.

Pharmaceutical Society of Great Britain.

COUNCIL MEETING.

NINETEEN members of the Council met at 16 Bloomsbury Square, W.C., on Wednesday forenoon, the absentees being Mr. Newsholme and Mr. Schacht, the latter still being virtually a member of the Council until May 20. The business transacted was of the usual routine nature, and the most important part of it came on *in camera* after reporters had retired. This was the final consideration of the annual report and financial statement of the Society, to which reference will be made elsewhere. The President, Mr. Michael Carteighe, is recovering from a rather severe cold, and the Secretary saved his voice by reading most of the formal resolutions which generally come from the chair, and to start with there were very long lists of names of persons elected associates and members of the Society. As an appendix to that list, the President moved the election as honorary members, of Dr. Isaac Bayley Balfour, F.R.S., Professor of Botany at the Edinburgh University, and a son of the world-famed "Woody-fibre," who was one of the earliest members of the Society; Dr. T. E. Thorpe, Director of the Government Excise and Customs Laboratories; and Professor A. Tschirch, of Berne, the eminent pharmacognist, whose work on the histology of drugs is now appearing. As correspondents, Mr. Carles, British Consul at Corea, a botanist of note, and Professor Louis Planchon, of Montpellier, were elected. The report of the North British Branch was then read by the Secretary: it contained only the usual features, except a slight increase in the expenditure incurred by the extension of the premises. It gave Mr. Storrar the opportunity of saying that the old friction between the North and South has quite died out, and that the Executive has little or nothing to do. Mr. Hampson and the Vice-President were pleased to know that Scotchmen had become so friendly to the Society, and delicately put it that they hoped there would be more of them at the end of the present year. It was agreed to refer the Edinburgh resolution regarding the Preliminary examination to the General Purposes Committee, the President remarking that it was important and should be thoroughly threshed out. The monthly financial statement, although covering the best month of the year, left the Council about 750*l.* short of money required to meet present and contingent liabilities. The Library, &c., Committee report contained reference to the request by students of the School of Pharmacy for a common room to meet in, which the Council declined to accede to on the pleas that during school hours the students have no time to use a common room, and the want of senior students to give tone to and control the juniors. The rest of the business was quite routine in character. The President, however, reported that he had seen Lord Herschell in regard to the Companies Bill, and he explained to the Council that the reference of that measure to a Select Committee would enable them to explain once more their position as a body of educated men in regard to company trading. Mr. Carteighe's delicate reference to the House of Lords brought from one or two of the members unexpected and heartily-received excomiums of that august body.

After the minutes were passed, Mr. RICHARD BREMBIDGE read the list of names of persons desiring election and restoration to the Society, the requests being acceded to *nem. con.* Diplomas were also granted to those who passed the Major examination last month.

HONORARY AND CORRESPONDING MEMBERS.

On the motion of the PRESIDENT, seconded by the VICE-PRESIDENT, Professor I. Bayley Balfour (of Edinburgh), Dr. T. E. Thorpe (Somerset House), and Professor A. Tschirch (of Berne) were elected honorary members of the Society. The President said that these names had been selected by the committee after careful consideration, and they had been exposed in the library for the statutory period. The mention of the name of Professor Balfour would recall that of his illustrious father, who was an honorary member of the Society, and, like him, a botanist of note. Dr. Thorpe was a chemist, and a scientist in the widest respect; while Professor Tschirch's eminence as one of the special workers in pharmacognosy was familiar to them. The names of these gentlemen would, he believed, add lustre to the roll of honorary members of the Society. (Hear, hear.) The Vice-President (Mr. John Harrison) thought the committee had exercised very great care and wise selection.

Mr. Carles, British Consul at Corea, and Professor Louis Planchon, of Montpellier, were elected corresponding members, the PRESIDENT appropriately referring to their services to science.

NORTH BRITISH BRANCH.

The SECRETARY read from MS. the report of the Executive of the North British Branch of the Society, which reported generally upon the work of the year from March, 1895, to March, 1896. Most of this has already been dealt with in THE CHEMIST AND DRUGGIST in reporting upon the meetings of the Executive. The expenditure during the period was 2,550*l.*, of which 1,401*l.* was classed as "ordinary," the rest being payments on account of the new buildings. The "ordinary" expenditure was fully 300*l.* more than in 1894, and was due, the report explained, to increased expense connected with the examinations and to larger premises. The examination-building is assessed at 100*l.* Reference, in tones of high approval, was made to the new scheme of examination, and the library and museum were reported to be in a satisfactory condition, the former showing a greater number of books lent.

The PRESIDENT said it was a very satisfactory report.

Mr. DAVID STORRAR said that although the Society was not so strong in Scotland as it ought to be, he thought the numbers were increasing, and he was glad to say that the friction which had formerly existed between the North and the South had entirely disappeared. The principal work of the Executive had been in connection with the new premises, upon which the Society had spent a large amount of money, and which would entail increased annual expenditure. Scotch pharmacists were gratified. The only objection to the Executive was that it had no work to do—(laughter)—the General Purposes Committee doing it all.

Mr. JOHNSTON corroborated that. Indeed, he said that of three meetings of the Executive Mr. Storrar attended only one. (Laughter.)

Mr. HAMPSON said the only thing unsatisfactory about Scotland—and whether it was due to the climate or not, someone who knew might say—was the law matters, which were ruinous to the Society from one point of view. He was glad that their Scotch friends now felt thoroughly in touch with them, for by union they could do a great deal. He hoped that the next report would show a great increase of members.

The VICE-PRESIDENT, while endorsing the last remark, said that the money spent was in doing justice to their Scotch friends, and not to charity. (Hear, hear, and laughter.) In such an important educational centre as Edinburgh, they did well to emphasise the position of the Society. He was pleased with the report, and hoped that there would be a further access of members.

Mr. MARTINDALE pointed out that as Edinburgh was nearer to the North of England than London many English students went to Edinburgh to be examined; thus the work of the Board there was not exclusively Scotch, so it was proper to have the two places alike, and he was glad to know that Edinburgh was efficient.

The resolution of the Executive regarding the Preliminary examination was then submitted and referred to the General Purposes Committee.

Mr. George Jeans, Park Road, Liverpool, had his name restored to the register of chemists and druggists.

FINANCE

The Society's own receipts during April amounted to 3,806 $\frac{1}{2}$., and after paying accounts, &c., 1,375 $\frac{1}{2}$. was left in hand to meet the demands of 2,451. The Benevolent Fund and Donation accounts received 942 $\frac{1}{2}$. and the balances on these accounts were—Benevolent, 773 $\frac{1}{2}$.; Donation, 431 $\frac{1}{2}$.; and Orphan Fund, 102 $\frac{1}{2}$. The accounts to be paid were of the usual character. The PRESIDENT briefly commented upon the report, which was passed.

BENEVOLENT FUND.

In committee it was reported that eight cases had been considered, one being declined, one deferred, and grants made of 55 $\frac{1}{2}$.—viz., five of 10 $\frac{1}{2}$. and one of 5 $\frac{1}{2}$.

Mr. BOTTLE, who had presided at the meeting, explained that the case to which relief had been refused was that of an applicant who had 170 $\frac{1}{2}$. absolutely under control, but preferred to keep it out at interest rather than use it up, and the committee were of opinion that their powers only permitted them to deal with those who are in a distressed condition.

Mr. ATKINS said that several members of the Society had given them important evidence which enabled them to decide upon the merits of the respective cases. One of the cases, a man—he might say a gentleman—of repute and parts, who had simply collapsed under the stress of the prevailing competition, showed that there were many who could not adapt themselves to the new state of things. The committee thought they could best assist him by putting him in the way of getting into touch with his friends, and this they had done. They were now having a set of small annuitants—viz., persons who came year by year to whom they gave grants, and he could not but think that some day or other the Society should have to create a lower scale of annuitants than those to whom they gave 50 $\frac{1}{2}$. a year.

Mr. CROSS, while sympathising with Mr. Atkins's good intention, hoped the day would be far distant when the Society would adopt any such course. By the present policy the cases came up before them periodically, and they were able to control what was given the applicants by increasing or decreasing the grants according to circumstances, which would not be the case if they made them small annuitants once for all.

Mr. ATKINS, in reply, stated that it was merely a suggestion he made.

APRIL EXAMINATIONS.

	Examined	Passed	Failed
London Major	25	12	13
London Minor	234	81	153
Edinburgh Major	5	2	3
Edinburgh Minor	188	66	122
Preliminary	408	174	234

Twenty-seven certificates were accepted in lieu of the Preliminary, and the Council authorised the Board of Examiners to accept a German school certificate on behalf of Arthur Rosenbircher.

INVITATION TO BUDA PEST.

The PRESIDENT read an invitation to the members to attend the Pharmaceutical Congress at Buda Pest on June 26 and 27, which gave Mr. BOTTLE and Mr. HAMFSON the opportunity of making some pleasantries regarding the President, suggesting that he should be sent as a deputy so that he might become thoroughly well, and Mr. Bottle thought a little turn in French would bring back his vice.

DECORATIONS

The PRESIDENT called attention to the photograph of the Philadelphia College of Pharmacy, which Mr. Howard B. French had sent as a memento of his visit to the Square. There were also exhibited in the Council-chamber ten whole-plate photographs of the principal departments of the Society's house, taken and presented by Mr. Sandell, a pharmacist, who, we believe, is the inventor of the anti-halation plate, made by Messrs. R. W. Thomas & Co. These are the finest photographs of the Society's house which we have seen.

THE COMPANIES BILL.

The PRESIDENT reported that he had interviewed Lord Herschell regarding the Companies Bill. Some of them would have noticed that an amendment had been put down which had been agreed upon by the various societies acting together with the Society, but when the matter was reached on the day that he attended, it was proposed to refer the measure to a Select Committee. He had heard the debate, although he had not read the report upon it. He might say that what he heard from Lord Salisbury seemed to show that what was in his mind was that if the Bill were referred to a Select Committee they should take evidence. If that was so there would be work for the watching committee, and he thought this reference would be good for the Society, because everything that allowed them to bring the case before a body of reasonable men was for their good. He thought that their educational qualifications might be considered with greater acumen by such a body as the House of Lords than by the House of Commons. (Hear, hear.)

Mr. HARRISON thought that nothing could be better for them than that greater light might be thrown upon their case, and he felt fully convinced that if they had the opportunity of laying their case before men of legal mind, sound judgment, and long experience, such as they would have in the Upper House, it would undoubtedly be beneficial.

Mr. HAMFSON solemnly referred to the probable fate of the measure and the consideration it would receive at the hands of the law officers in that great assembly. The quiet manner in which this opinion was uttered left the members of the Council in doubt until they heard the last two words, and as Mr. Hampson resumed his seat a ripple of laughter burst out all round the table; and this was the true to which our reporter retired, the Council having arranged to consider their annual report in committee.

ANNUAL REPORT OF THE COUNCIL.

FINANCE.

The fifty-fifth financial statement submitted with this Report shows an increase in several items of expenditure. The adverse balance on law charges is made, but not out of proportion to the work done. The duty of carrying out the provisions of the Pharmacy Act imposed on the Council can only be efficiently accomplished by considerable expenditure which the costs allowed, even if obtainable, fail to cover. The Council has spent a considerable sum in completing the decoration of the rooms of 16 Bloomsbury Square. It has also invested in the remodelled *Pharmaceutical Journal* a considerable portion of its annual income, the financial benefit of which, it is believed, will appear in succeeding years in reducing the balance against that account. The Council has had to meet in the years 1894 and 1895 a capital expenditure in the building and equipment of the examination hall and laboratories in Edinburgh of about 3,300 $\frac{1}{2}$., of which a sum of 2,243 $\frac{1}{2}$. has been provided from revenue. The income from fees was considerably less than in the preceding year owing to there being fewer candidates for examination. Variations of this kind occur from time to time, followed by increased receipts.

EXAMINATIONS.

The number of candidates presenting themselves for the pharmaceutical technical examinations during 1895 was considerably less than in the preceding year. The total number of candidates was 1,450, of which 1,304 were for the qualifying examination and 146 for the Major examination. The rejections in the case of the Minor examination were 65.72 per cent., 857 candidates (574 in London and 283 in Edinburgh) having been found to lack that "competent practical knowledge" which the Pharmacy Act, 1868, declares it essential for persons practising pharmacy to possess. This high percentage is doubtless due to the increased scope of the examination, which, to quote from the last report of the Government Visitor for England and Wales, is "a fair one, and the stringency of the practical examination in chemistry commendable." The statistics for the Major examination show that of 146 persons presenting themselves (130 in London and 16 in Edinburgh), 78 failed, or 60 per cent. There were 1,430 candidates for the First examination in 1895, as

against 1,541 in the previous year. The rejections, which were a little over 50 per cent. a few years ago, have steadily risen to 52.65 per cent. during the past twelve months. In connection with the examinations, it may be noted that the Executive of the North British Branch has forwarded a resolution to the Council, advocating the increasing of the standard and scope of the Preliminary examination. The resolution will receive the careful consideration which the subject demands.

MUSEUMS.

Considerable progress has been made in cataloguing the rich collections of the Society. The catalogue of the medicinal plants in the herbaria of the Society is now complete. An annual report of 105 pages, including the additions to the museum and herbaria in London during the year 1893-94, has been issued. The catalogue of the herbarium of British plants is now in the printer's hands, and will be published in the course of the year, having been thoroughly revised and brought into accord with modern botanical nomenclature. Duplicate specimens of drugs and medicinal plants have been distributed to various local associations, and exchanges made with other museums. Numerous and important donations have been received from correspondents, both at home and abroad. In addition to other services rendered to pharmacists by this department of the Society, reference may be made to the large number of inquiries relating to drugs which are addressed to the Curator, and dealt with by him.

LIBRARIES.

The maintenance of the Libraries in London and Edinburgh is a prominent feature in the Council's work, and during the past year many additions have been made to that department. The main growth in the Libraries is in the periodicals, of which the Society possesses many very valuable sets. Nearly all new books which are considered worthy of a place are obtained, either by purchase or through the much-appreciated generosity of the authors.

SCHOOL.

The fifty-fourth session of the School was inaugurated in October by an able address from Dr. F. T. Roberts, Professor of Medicine in University College. The distribution of prizes to successful students was rendered more than usually interesting by the attendance of Count Siegfried Clary from the Austrian Embassy to receive the Hanbury gold medal on behalf of Professor August Vogl, of Vienna, to whom it had been awarded.

EVENING MEETINGS.

The scientific meetings in London and Edinburgh have furnished a number of papers, which were in many cases productive of interesting discussions on important practical matters relating to pharmacy. In London, papers were provided by Professors Dunstan and Greenish, Messrs. Martindale, F. Browne, A. Gunn, Tickle, Carr, and J. C. Umney; in Edinburgh, by Dr. Lockhart Gillespie, Dr. W. Inglis Clark, Messrs. Dott, Boa, and Forret, whilst Dr. Gibson delivered an admirable introductory address.

RESEARCH.

At the meeting of the Council in June a resolution was adopted appointing a special committee to inquire as to how far the objects of the Research Laboratory had been attained. The Committee was also asked to report upon any suggestions that might appear desirable to adopt in the future conduct of the laboratory. The Committee after full and careful deliberation reported (a) that in its opinion "the completed work which has emanated from the laboratory is on the whole satisfactory, and reflects credit on the Society," and (b) suggested that, "concurrently with such work as has already been undertaken, it is desirable that attention be devoted to the chemical and physical examination of substances used in medicine, whether official or non-official." It was further suggested that the Director of the Laboratory should attend each meeting of the Library, Museum, School, and House Committee, and that the Research Committee should report to the Council twice a year. These suggestions were adopted at the July Council meeting, and in accordance therewith an Interim Report of the Research Committee was presented early this year.

LEGAL.

During the year 1895 upwards of 350 cases of alleged infringement of the Pharmacy Acts were reported to the Registrar, and investigated. In the majority of cases in which proceedings were taken, the penalties incurred were paid without contest, and it is satisfactory to note that in practically every instance in England and Wales where it was necessary to go into Court, judgment was given for the Society. One of these cases was that of the sale of arsenical fly-papers by a firm of oilmen, wherein it was held by the County Court Judge that they had sold "a poison" within the meaning of the Act. Leave was given to appeal, but the manufacturers ultimately accepted the decision of the County Court Judge, and have since intimated that they do not intend to issue any more fly-papers containing arsenic. In several cases proceedings were instituted against unqualified persons for the sale of arsenical weed-killers, and in two cases penalties under Section 17 of the Act have been imposed on limited liability companies.

In the Scottish courts the principal cases were those of Turnbull and Hume, who respectively used the titles "photographic chemist" and "technical chemist," kept open shop, and sold poisons. The Sheriff-Substitute held that the words "photographic" and "technical" so qualified the title "chemist" that the use of such a description was not an offence under the Act. Upon appeal to the High Court of Justiciary, the Lord Justice Clerk, Lord Young, and Lord Trayner unanimously reversed this decision, and gave judgment for the Society.

The Society has experienced some difficulty in carrying out the provisions of the Pharmacy Acts in Scotland. In an action taken against a firm of seedsmen in Glasgow for selling an arsenical preparation unlabelled, the Sheriff held that the Registrar of the Society had no title to proceed in Scotland under Section 17 of the Pharmacy Act, 1868, and that the proper person to take action was the Procurator Fiscal for the district. All the evidence in the case was sent to that officer, who, however, declined to take any action in the matter. Proceedings were afterwards instituted by the Society against the unqualified assistant who sold the article above referred to, and, although the respondent pleaded guilty, the Sheriff dismissed him with an admonition and refused the Society any expenses. In other cases in Scotland, although the evidence of infringement has been quite clear, only nominal penalties have been inflicted.

During the year the official list of applicants for patents has been carefully watched, in order to prevent any scheduled poisons from becoming the subject of a patent. In fifty-nine cases of applications in respect of medicinal preparations, the prospective patentees were communicated with, and in most instances abandoned further patent proceedings after receipt of intimation that the Society would move for revocation. The result has been that only three actions have been necessary in the Court of Chancery for the revocation of patents for medicines. None were seriously contested, and in each case the revocation asked for was granted.

PARLIAMENTARY.

The Council has been fully alive to the necessity for carefully watching the work of the Legislature during the session, and with that view sanctioned the appointment of a Standing Sub-Committee of the Law and Parliamentary Committee to act in cases where prompt action seemed expedient to preserve the interests of chemists in Great Britain. Much good work has been effected by judicious representations to Public Departments, and the Council may refer to the efforts made to secure an amendment in the law relating to limited liability companies as an indication of the determination not to permit the evils which press against pharmacy to remain unremedied for want of official protest. With the valuable co-operation of various corporate bodies representing medicine, dentistry, and veterinary surgery, the Council hopes that the Companies Bill now before Parliament may be so modified as to effect a satisfactory amendment of the law relating to limited liability companies.

NORTH BRITISH BRANCH.

The Report of the Executive of the North British Branch presented to the Council at its last meeting indicates that the work of the Examinations and of Administration have

been efficiently carried out. The advantages offered by the extension of the Society's premises, and the erection of the new chemical and pharmacy laboratories, have facilitated examination work very considerably.

HONORARY AND CORRESPONDING MEMBERS.

The Council has recently added to the roll of honorary members the following:—Professor I. Bayley Balfour, F.R.S., Director of Royal Botanic Gardens, Edinburgh; Professor T. E. Thorpe, F.R.S., Head of the Government Laboratories, Somerset House; and Professor Tschirch, Professor of Pharmacognosy, Berne. The following have been elected corresponding members:—W. R. Carles, H.B.M. Consul at Corea, and Dr. Louis Planchon, of the Montpellier High School of Pharmacy.

BURROUGHS MEMORIAL SCHOLARSHIP.

The Council has agreed to act as trustees of the Burroughs Memorial Fund, and with the consent of the subscribers and the approval of the Council it is intended to endow an annual scholarship of the value of about 25*l.* per annum in advanced pharmaceutical education.

BENEVOLENT FUND.

There was a slight falling-off in the annual subscriptions in 1895, 1,694*l.* having been received as against 1,712*l.* in 1893 and 1,702*l.* in 1894. The amount distributed in casual grants and in the payment of annuities was 2,693*l.* The generous gift of 100 shares from the Chemists' Aërated and Mineral-water Association (Limited) and its Chairman (Mr. H. Davenport) will produce an encouraging addition to the annual income. Mr. Wm. Hooper's legacy of 100*l.* was received during the year, but the aggregate amount of donations and legacy falls short of that received from the same source in 1894 by nearly 400*l.* In view of the falling revenue of the fund, the Council hopes that local and divisional secretaries will make special efforts to bring to the notice of their fellow-craftsmen—who are non-subscribers—the claims and needs of the Benevolent Fund.

DEATHS.

Among deaths the names of the following have to be recorded:—Dr. H. Cleghorn and Professor Pasteur, honorary members; M. A. Lawson, M.A., and Dr. R. Godeffroy, corresponding members; B. Cordley, Colchester; W. Gunn, Duns; J. W. Littlefield, Ventnor; and R. H. Swingburn, South Molton, local secretaries; T. H. Hall, divisional secretary for East Islington; J. S. Linford, a former examiner; J. W. Forbes, of Bolton; H. B. Cocksedge, of Sandown; H. H. Millhouse, of London; G. Dudgeon, of Nottingham; and E. Taylor, of Rochdale, well-known members of the Society.

FINANCIAL STATEMENT FOR 1895.

RECEIPTS.

	£	s.	d.
Balance January 1, 1895:—London and Westminster Bank ..	1,890	15	4
In Treasurer's hands	28	17	4
In hands of Chairman of Executive (Scotland) ..	45	8	0
Interest on Investments:—Dividends and Ground Rents ..	166	1	0
Rent of 15 Bloomsbury Square ..	187	10	8
Sale of 1,000 <i>l.</i> Two-and-a-half per cent. Annuities ..	1,057	9	0
Subscriptions:—1,357 Members, Pharmaceutical Chemists ..	1,424	17	0
522 „ Chemists and Druggists ..	611	2	0
1,652 Associates in Business ..	1,734	12	0
946 Associates not in Business ..	496	13	0
797 Students	418	8	6
12 Life Subscriptions	126	0	0
Fees paid upon restoration to the Society	5	17	0
Examination Fees:—1,433 First Examination	2,582	9	0
1 Modified „	1	1	0
1,357 Minor „	5,713	1	0
143 Major „	403	5	0
Fees for Restoration to the Register	26	5	0
Registration Fees as Chemists and Druggists	14	14	0
Journal:—Advertisements and Sales	3,954	10	7
Register:—Sales to the Government	147	10	0
Sundry Sales	13	10	0
Calendar—Sundry Sales	27	17	0
London and Westminster Bank—Advance	1,500	0	0
Due to Treasurer December 31, 1895	13	18	9
Total	£22,591	12	2

EXPENDITURE.

	£	s.	d.
Annuity:—Mr. Elias Bremridge	400	0	0
Carriage of Books and Parcels	16	4	0
Certificates of Death	20	6	10
Evening and other Meetings	43	15	2
Examinations:—			
Fees to Examiners—England and Wales	1,292	11	4
Scotland	716	12	11
Fees to Superintendents—First Examination—			
England and Wales	215	15	6
Scotland	33	1	6
Hire of Rooms for Conducting First Examination—			
England and Wales	73	4	0
Scotland	10	0	0
Travelling Expenses—England and Wales	162	19	4
Scotland	62	3	6
Refreshments for Examiners—England and Wales	57	1	1
Scotland	49	19	4
Apparatus, Drugs, and Chemicals for Examinations, Printing, and sundry charges in connection therewith—			
England and Wales	388	2	2
Scotland	167	15	2
Fees to the College of Preceptors	190	9	0
Fixtures, Fittings, and Furniture	81	4	7
Gas, Water, Coal, Cleaning Materials, &c.	340	6	6
House Servants—Wages	279	13	0
Journal:—Salaries, Paper, Printing, Commission, Contributions, Reporting, and Sundry Charges	6,715	18	11
School of Pharmacy:—Stipends of Professors of Practical Chemistry, Chemistry, Botany, and Materia Medica, and of Lecturer on Practical Pharmacy	612	10	0
Subscription to Royal Botanic Gardens	21	0	0
Lecturers' Assistants	186	17	0
Apparatus, Chemicals, and Specimens for Lecture Classes, Prize Medals, Certificates, &c.	119	17	2
Printing and Posting Prospectuses	40	6	9
Law Costs:—Balance of Account	771	1	4
Library:—Librarian's Salary	250	0	0
Purchase and Binding of Books	89	19	0
Librarian attending Meeting of the Library Association	10	10	0
Museum:—Curator's Salary	400	0	0
Assistant's Wages	52	0	0
Curator attending Museum's Association Meeting	10	10	0
Specimens, Bottles, and Sundries	27	7	7
Expenses in Scotland:—Assistant Secretary—Salary	250	0	0
Taxes and Insurance	67	11	7
Members of Executive—Travelling Expenses, &c.	31	8	1
Fuel, Light, Water, Cleaning, Service, and Miscellaneous Expenses	339	6	6
Society's House in Edinburgh:—Completion of the New Examination Rooms and Hall	1,149	9	9
Postage:—General	216	8	5
Journal (Cost of Transmission to Members, Associates, and Apprentices)	837	1	10
Pharmacopœia Committee of the Society (paid on account of)	68	10	8
Provincial Education	45	0	0
Register—Printing and Publication	177	19	2
Rent, Taxes, and Insurance of Plate Glass	791	14	3
Repairs and Alterations, including completion of the decorations of No. 16 Bloomsbury Square	1,053	5	8
Stationery, Engraving, Printing, and Office Expenses	281	4	5
Calendar—Printing and Publication	105	5	5
Salaries:—Secretary and Registrar, and Clerks	1,575	19	0
Research Laboratory	350	0	0
Cost of Materials supplied to the Jacob Bell Scholars	10	0	0
Herbarium and Council Medals, and Sundries	13	0	10
Travelling Expenses—Council and Committees	487	18	3
Refreshments for Council	50	3	4
Balance, December 31, 1895:—			
London and Westminster Bank	785	6	9
In hands of Chairman of Executive (Scotland)	5	15	7
	£22,591	12	2

Benevolent Fund—The receipts were 1,694*l.* 4*s.* 1*d.* from subscriptions, and 1,038*l.* 2*s.* 4*d.* from interest on investments, which, with balance from 1894, made the amount on the

debit side 3 246l. 12s. 5d., and to balance that were the following sums:—

	£	s.	d.
Annuities paid	2,193	0	0
Grants	493	0	0
Secretary's Casual Fund.. .. .	10	0	0
Interest repaid to Orphan Fund	35	0	0
Printing, Postage, &c.	44	10	9
Surveyor's Fee	1	11	6
Balance	472	10	2
	3,246	12	5

Donations and legacies amounted to 354l. 5s., and Orphan Fund receipts were 18l. 18s. 6d., from subscriptions, and 44l. 15s. from interest. The Society has one orphan, for whom 30l. was paid.

THE INVESTED FUNDS

of the Society now stand as follows:—

	£	s.	d.
Freehold Ground Rents at Paddington Green, London, W., cost	5,551	5	6
House in Edinburgh, cost	1,931	10	0
Additional Building, cost	3,111	4	9
Leasehold Premises:—Galen Place, cost	10,606	10	2
15 and 16 Bloomsbury Square, cost	9,527	5	3
	30,727	15	8

The Benevolent Fund investments amount to 27 647l. 2s. 5d., and the Orphan Fund to 355l. The Society also had certain securities in trust, viz:—Pereira Memorial, Bell Memorial, Haubny Memorial, Redwood Memorial, Hills Prize, and Manchester Pharmaceutical Association Scholarship Funds. These are the same as last year.

An Assistants' Night Out.

LAST Thursday (April 30) the members of the Chemists' Assistants' Association hied them to Camden Town, where Messrs. Idris & Co. (Limited) kept open house for them, the occasion being an inspection of the works and laboratories, followed by a lecture by Mr. T. H. W. Idris, L.C.C., on the manufacture of aerated waters. The attendance was so large that it was not surprising to see a member of the Council view the gathering crowd with despair when he thought aloud that 103 Great Russell Street seldom gathers more than a tithe of those who had found their way to Pratt Street. It was a few minutes past 8 when Mr. Idris took the first party up the spiral staircase to the top of the building, where they had the bird's-eye view of the factory, as it was depicted in THE CHEMIST AND DRUGGIST, May 5, 1894; then Mr. Jones took a party, Mr. Bishop another, while Mr. Deputy Hughes remained in the office to give late stragglers a welcome. To follow the various inspecting parties through the works would be to repeat ourselves. They saw everything mentioned in our description of the factory, from the washing of bottles to the cultivation of microbes; and, in regard to the latter, the efficient way in which Dr. Symons and Mr. Stephens explained things so attracted the crowds that some degree of congestion resulted in the vicinity of the laboratories, and parties got mixed. The machine-room, where the block-tin parts of syphons are cast, turned, polished, and silvered, was also a favorite spot, and if one could judge from the exclamations which fell from the visitors, the syphon and its top had hitherto been as great a mystery to them as the apple in the dumping. It took a little more than an hour to get round the departments, which were all in full swing; and perhaps as popular as others were the glass-engraving-rooms—a business-annexe of the factory which is significant of the scale upon which aerated waters are turned out, as the firm employ about a score of skilled men and women doing nothing else than engraving syphons and glass showcards, the sand-blast being solely employed. Although they do engraving for outsiders, they started the annexe for their own business purposes; and it is this, we think, which is so eloquent of the extensiveness of their production. Another feature, which could not fail to strike the observant, was the speed at which the workers work, and that willingly, for

most of them are paid by the piece. The perambulation of the factory was so arranged that the visitors returned to the warehouse, where Mr. Idris was to give his lecture. There also was a well-laden buffet, and nice girls to attend to the young men. After all had refreshed themselves, Mr. Idris, speaking extemporaneously, gave the members a hearty welcome. He said that before he started the soda-water trade twenty-five years ago the syphons in use were smaller, different in shape, and had tops which contained lead. This was a decided objection to their extended use, and he set himself to improve them, with the result that they had seen. There they had no secrets, and any person interested in any process would be welcome to go minutely into any of the details of the factory. He proceeded to speak of the water-supply, which as delivered to the factory is filtered through Berkefeld filters and is then softened, either with carbonate of soda or lime-water, prepared from marble lime burnt on the premises. The black variety of marble is found most suitable, because it is much more free from silica and other impurities than white marble, and the coloring matter is simply a little bitumen, which is completely burnt in the furnace. During the softening the finely-divided precipitated carbonate of lime carries down with it from 75 per cent. to 95 per cent. of the micro-organisms present. A considerable quantity of the water used is also purified by distillation, effected by indirect or steam heat, and afterwards filtered through foundry-coke of a special quality. Mr. Idris then described how the carbonic-acid gas is prepared, showing that the gas from chalk gives a crisper water than other forms of the gas; and he also spoke in detail of the processes of bottle and syphon filling, all of which we dealt with in the article referred to. Speaking of the manufacture of fruit-essences, he said that Idris lemonade is flavoured with a tincture of the fresh peel, the process of peeling and pressing having been seen by the members. Oranges and limes are treated in the same way; other fruits require special treatment. Raspberries and strawberries require to be slightly fermented to develop the fullest flavour. The juices are then stored in bottles and sterilized. The production of other essences and the manufacture of brewed ginger-beer were touched upon, Mr. Idris explaining that his firm no longer use a ferment for ginger-beer, as they find that they get very good results without it.

Following Mr. Idris came a crisp and harmonious speech from Mr. Deputy Hughes, and Mr. Jones and Mr. Bishop also spoke, after which Mr. E. W. Hill, President of the Association, warmly thanked the firm for their hospitality and the intellectual treat Mr. Idris had given the members.

Thus closed a visit which cannot have failed to have instructed the members greatly; and should the Association be so fortunate as to get two or three firms in other departments of business to receive them in a similar fashion in future sessions, there is no question that the usefulness of the Association and its prosperity would be much enhanced.

No fewer than 1,651 books on medical science were published in Germany last year. In 1894 the number was 1,631. The books on subjects of trade and manufactures published in the same country in 1895 numbered 1,229, an increase of 127 upon the preceding year.

THIS STORY WAS TOLD by Mr. W. Bademann to the students of the Chicago College of Pharmacy. Justus von Liebig once invited a lot of artists and scientists to a garden festival in the charming vicinity of Munich. The party passed a big glass globe in the park, went there for the amusement of the passers-by, who gazed at their reflections in the globe in all sorts of caricatures. It was on a hot summer day, at sunset time, and it was found that the globe was intensely hot on the east side. The scientists at once advanced all sorts of theories as to why the glass was so hot on the side that was not touched by the rays of the sun. But none of the explanations was satisfactory, so the gardener was called to the scene, and was asked, "John, can you explain why this globe is hottest on the side turned from the light?" John replied, "Certainly I can; I passed by here a few minutes ago, and found the globe so terribly hot towards the west that I thought best to give it a twist." Liebig laughed, quoting Goethe. "Grey is all theory, and green the everlasting tree of life."

Legal Reports.

THE YORKSHIRE RELISH CASE.

BEFORE Mr. Justice Stirling, in the Lord Chancellor's Court on May 1, Mr. Graham Hastings, Q.C., moved on behalf of Mr. Wm. Powell, trading as Goodall, Backhouse & Co., the proprietors of the Yorkshire Relish sauce, for a writ of sequestration on the estate of the Birmingham Vinegar Brewery Company, and also against their manager, Mr. Thompson, on the ground that they had committed a breach of the injunction restraining them from selling bottles of sauce without sufficiently distinguishing them from the goods and bottles of the plaintiffs. Notice of the motion was originally served during the vacation. It related to what was known as the "second-bottle" label, and it had stood over pending the appeal. The appeal of the defendants having been dismissed with costs, counsel claimed that the plaintiffs had now the right to demand sequestration. Inasmuch, however, as another appeal had been entered in the House of Lords, he did not press it to the extreme point. He should be satisfied if an expression of regret was tendered, and if the defendants paid the costs.

Mr. Whinney, for the defendant company, said that pending the appeal to the House of Lords the defendants would obey the injunction.

After slight discussion, it was arranged that the defendants should pay the costs of the present application, on an undertaking being given by the plaintiffs' solicitors that they would repay the sum in the event of the appeal in the House of Lords being successful.

A REMINISCENCE OF THE TRUST AGENCY.

In the Chancery Division of the High Court of Justice, on May 2, the case of *Harry v. The Trust Agency and Guarantee Company of England (Limited)* came before Mr. Justice North on a motion for judgment in default of defence. Counsel stated that the statement of claim asked for specific performance of an agreement for the sale of a chemist's business at Sloane Square for 900*l.*, of which 50*l.* was paid on deposit, and the purchase was to be completed in May, 1895. The plaintiff had always been ready and willing to carry out the contract, but the defendants had refused to perform it. A declaration for specific performance of the agreement was accordingly asked for, together with incidental relief. Mr. Justice North granted the relief asked for.

A SUCCESSFUL APPEAL.

MR. WILLIAM POWELL, trading as Goodall, Backhouse & Co., wholesale druggists, Leeds, brought an action in the Chancery Division last December against Mr. and Mrs. Wedderburn, who owned certain property in Leeds adjoining the plaintiffs, in regard to the obstruction of light. Mr. Justice Romer came to the decision that the plaintiff had put up a new building differing from the old one in size, position, and character, including the position of the lights, so that he could not say whether the defendants' boardings which were complained of would have obstructed the plaintiff's old lights, and he dismissed the action with costs. Mr. Powell appealed from this decision, and last week the Court of Appeal reversed Mr. Justice Romer's judgment, allowing the appeal, with costs.

AN UNSUCCESSFUL APPEAL.

In the Divisional Court of the Queen's Bench on Thursday, before the Lord Chief Justice and Mr. Justice Wright, the case of *Watts v. Costerton* was an appeal from the decision of Judge Martineau at the Brighton County Court. The plaintiff, a bricklayer, was awarded 60*l.* damages, with costs against the defendant, Mr. H. A. Costerton, chemist and druggist, of Western Road, Brighton. The plaintiff was working on some new premises which Mr. Costerton was having built, and the scaffold fell, seriously injuring the man, who had, it appears, made a complaint about the scaffold being unsafe. The defendant pleaded *volenti non fit injuria*; but Judge Martineau found there was *volens* but not *volens* as

the defendant had a family to keep and support, and if he had refused to work on the scaffold he might have been discharged. The Court now confirmed the decision given by Judge Martineau.

COUNTY COURT CASES.

A MANAGER'S AUTHORITY.

IN the City of London Court, on May 2, the London Press Exchange (Limited) sued Messrs. B. Shop & Co., before Mr. Commissioner Kerr, to recover 25*l.* 10*s.* for advertisements inserted in various papers in reference to Harmony borax, upon the alleged authority of the defendants, who traded as the Harmony Borax Company, 13 Idol Lane, E.C. Mr. Llewellyn Davies was counsel for the plaintiffs, and Mr. Shearman for the defendants. The orders for the advertisements were given by one Carpenter, who was the defendant's manager, and the plaintiffs claimed that in that capacity he was authorised to give orders for advertisements. Mr. Davies said that it was still an open question whether Carpenter had authority in the eyes of the law to give the orders which he had given. Some Courts had held one way and some the other. Mr. Chas. Jenkins, a canvasser in the plaintiffs' service, spoke to having taken the orders from Carpenter, who, he said, told him that he was the defendants' manager, and as such was empowered to give orders for advertisements. In cross-examination, he admitted that he had known Carpenter for ten years, and had arranged to halve his commission with Carpenter. He believed Carpenter to be an honest man at that time, but he knew that he was now awaiting his trial for theft. There was everything to show that Carpenter was the defendants' manager, and he supposed that was sufficient authority to enable him to give orders. He received 50*l.* in commission over the orders, and out of that he gave Carpenter 25*l.* Carpenter told him his employers allowed him to take the commission. He could not say that it was the practice to divide commissions as he had done. Mr. Shearman said that Carpenter had no authority to pledge the plaintiffs' credit for advertisements at all. He had given orders for 1,000*l.* worth of advertisements, so that the matter was of much importance to the defendants. One action in the High Court had been decided in their favour. Mr. Davies said that an action in the Mayor's Court was decided against the defendants on the question of authority. Evidence having been called on behalf of the defendants, Mr. Commissioner Kerr said he should hold that the manager of a borax business had no implied authority to order advertisements as Carpenter had done. He had authority to sell the borax in the shop, but not to buy any. The defendants had traded as the Harmony Borax Company, and the sooner the Legislature compelled the registration of partnerships the better. It would put an end to a great deal of fraud. He would nonsuit the plaintiffs, and he would hold as a fact that there was no express authority. The plaintiffs could appeal if they wished. Mr. Davies said they would. Mr. Shearman said the defendants would be glad to have the question of authority settled by the Divisional Court once and for all, because it would probably have an effect upon the other litigation which would arise on the contracts not yet completed. Mr. Commissioner Kerr said he must give the defendants their costs.

PIGS, FOWLS, AND CHEMICALS.

AT the Wakefield County Court on Tuesday, Judge Greenhow was for a long time engaged in hearing an action in which a well-known football player, named Alfred Whiteley, of Calder Vale Road, Wakefield, was the plaintiff, and Messrs. Botherton & Co., ammonia and tar distillers, Calder Vale, were the defendants. The action was to recover 16*l.* 6*s.* as damages for loss of pigs and poultry. The case for Whiteley was that the defendants had allowed a quantity of hot chemical fluids to run over his land, on which he kept pigs, goats, fowls, &c., with the result that he had lost nine pigs and fifty fowls. The pigs got into the chemicals when they were hot, and the fowls drank them when they were cold. The defendants, whose defence was a denial of liability, had a verdict given against them, and were ordered to pay the plaintiff 10*l.* 10*s.*

CARBONATE-OF-SODA DISPUTE.—ROMANTIC STORY.

IN the City of London Court on Wednesday, before Mr. Commissioner Kerr, James Anderson & Co., druggists' sundriesmen, 101 Great Tower Street, sought to recover 7*l.* 16*s.* 9*d.* for carbonate of soda supplied to John Pigott, the administrator of the late Susan Pigott, 214 Hornsey Road. Mr. Broxholme, who appeared for the plaintiffs, said the story was a romantic one. The defendant was married twenty-two years ago, and soon after marriage he left his wife. She then started in business on her own account, and many years after she married a Mr. Young with whom she lived as his wife, the two of them carrying on the business which she had started. They gave orders to the plaintiffs amongst other firms, and the accounts had been paid from time to time, the balance now claimed for being due. On July 14, 1894, Mrs. Pigott, then known as Mrs. Young, died. After she had been buried her husband, who had not been heard of for so long a time, suddenly appeared. He explained to Mr. Young who he was, and told Young to leave the place. Young declined, as he had put 100*l.* into the business and had worked in it for some years. The husband then instituted Chancery proceedings, and was appointed administrator of his wife's estate, and it was held that he was entitled to all his wife's property, she having died without having made a will. The plaintiffs therefore brought that action against the husband, as he had taken all that his wife had. Mr. Moresby, for the defendant, said that was not so. The defendant's wife never had the goods sued for. They were supplied to Young, who was liable. Chancery proceedings were now pending with a view to determining the amount to which the husband was entitled from Young. His Honour said no doubt it was shabby on the defendant's part to take all his wife's money and not pay the plaintiffs their debt; but he could not help the plaintiffs, as Young seemed to have ordered the carbonate of soda. Mr. Moresby said there was really no shabbiness on the defendant's part if all the facts were known. His Honour said that morally a man who deserted his wife was not entitled to a penny of her money; but he had to decide the case according to law. He must find for the defendant, but he would wait and see how much the defendant received from his wife's estate before he ordered the plaintiffs to pay the costs of the action.

CHEMISTS IN THE WESTMINSTER COUNTY COURT.

ON Tuesday a judgment-summons in the case of Harper *v.* Holton was heard. The plaintiff applied for the committal of the defendant, who was described as a chemist in a good way of business in North London. The debt was for fancy goods supplied in the way of trade. The defendant said he was out of business now, and could not pay the debt while he was in his present condition. His Honour declined to commit, but made an order for payment of 2*l.* a month.

On the same day a chemist, named Barret, sought to enforce payment of a judgment-debt in respect of perfumery supplied to the order of the defendant. His Honour said the amount was too large for a committal order, but he would make an order for payment of 3*l.* a month.

THE SALE OF A CHEMIST'S BUSINESS.

IN the Queen's Bench Division of the High Court on Monday, before Mr. Justice Lawrance and a common jury, the case of Green *v.* Williams came on for hearing. The action was in respect of the sale of a chemist's business, at 38 Heath Street, Hampstead, plaintiff's claim being for damages for breach of contract. Defendant admitted that he entered into an agreement to buy, but said that he was induced to do so by the fraudulent representations of the plaintiff, in respect of which he counterclaimed for damages.

Mr. McIntyre and Mr. Turner appeared for the plaintiff, and Mr. Thomas, Q C, and Mr. Rowen for the defendant.

Mr. Turner, in opening the case, said that the plaintiff, Mr. Green, was last year carrying on business at 38 Heath Street, Hampstead, and, being desirous of selling the business and going elsewhere, he put the matter into the hands of Messrs. Judd & Manners, well-known agents in this particular trade, of Cannon Street. At the end of September, the defendant wished to move from Westbourne Park to some healthier and more lucrative spot, or, perhaps more correctly,

to a more unhealthy and lucrative spot, and he approached Messrs. Judd & Manners. He was then told of the plaintiff's business, and after being informed as to its character and takings, he called at the shop and made inquiries for himself. Finally, he agreed to purchase the business for 375*l.*, and an agreement was drawn up and signed. The defendant, however, refused to complete, first alleging that he was unable to find the money, and then that the character of the business had been misrepresented.

Mr. John Henry Green said he was a qualified chemist and druggist, and for seven years had carried on the business at Heath Street, Hampstead. Last year he found he had not sufficient capital to carry on the business, so he put it into the hands of Messrs. Judd & Manners for sale. Mr. Manners came to the shop, and saw the kind of business it was. He saw the takings-book, and made certain memoranda. In 1894 the takings were 706*l.* 7*s.* 6*d.*; in 1893 759*l.* 6*s.*; and in 1892 705*l.* 8*s.* After Christmas, 1894, the takings fell off, as he had not sufficient capital to replenish the stock. At the end of September, 1895, the defendant called at the shop and inquired as to the character of the business. He was shown the weekly takings, and also well understood that the takings were falling off, owing to the causes mentioned. At the time Mr. Williams called he was doing a little over 10*l.* a week. He certainly did not tell him they were at that time over 14*l.* a week. Witness finally agreed to accept 375*l.* for the business, and an agreement was drawn up and signed. Completion was to be on November 1, 1895. From the middle of October it was arranged that the defendant should attend at the shop and practically conduct the business, so as to get acquainted with the customers, the profits from that time until the completion of the business being divided between them. Defendant complained that the stock was low, and witness said he was quite aware of that, or he should have asked more for the business. Defendant ordered about 25*l.* worth of goods, but he did not, until after the time for the completion of purchase, say that the business was not as had been represented, or that he was unable to get the money ready. Defendant refused to complete the purchase, and the business was ultimately sold by tender for 120*l.* Witness estimated his loss at 215*l.* 17*s.* 1*d.*

In cross-examination, witness denied that the takings for the years 1892-94 were added up at the same time. He told the defendant that business was slow in October, that being a dull time of the year. The returns for 1895 were 605*l.* It was a fact that during the last fortnight in November the takings were at the rate of 600*l.* a year. He could have sold more with a larger stock. He told defendant his net profits were about 250*l.*, and patent-medicine account 15*l.* a month. He did not say he was taking 10*l.* a week, but that many of his customers were away. He did not remember the defendant asking to see the invoices or books. He had brought eight children up on the business, and he told Williams that.

Mr. Manners gave evidence in support of the plaintiff's case. In cross-examination, he said Williams told him he was not quite satisfied with the business, and asked whether he could rely on Green's figures. Witness replied that he had made inquiries of the wholesale houses, and learnt that Green was a man to be trusted. Mr. Williams seemed to be anxious to obtain the business. After signing the agreement, Green wrote expressing his disappointment with the takings. He agreed that 1*l.* 4*s.* was a very poor day's takings for a Saturday, which was generally considered to be the best day in the week.

The defendant, Mr. Stephen Williams, in the course of his evidence spoke as to the conversation he had with the plaintiff. The latter said that his net profits amounted to 250*l.* a year, and his patent-medicine sales to 15*l.* a month. He had been unable to see any of the books, with the exception of the day-book and the prescription book, and he was not shown any of the invoices. He told Mr. Manners that he was dissatisfied with the condition of the business, but he was advised to stay in the shop for a fortnight, and then, if he was still not satisfied, to consult a good lawyer.

In cross-examination, the witness said that when he went behind the counter he saw there was very little stock.

His Lordship: Then if a man wanted a seiditz-powder in a hurry he could not have one?

Witness: No. Continuing, he said he had written a letter

saying that he would offer 375*l.* for the goodwill of the business and fixtures, although there was very little stock.

His Lordship: You could not go much further than that if you had smelt into every pot in the place. (Laughter.)

Further cross-examined, witness said he had sufficient money to complete the purchase on November 1, but practically his capital would have been exhausted.

In the result the jury found for the plaintiff on the claim and counterclaim for 229*l.* 18*s.*, less 64*l.* 0*s.* 11*d.*, being the amount of the deposit and goods supplied. His Lordship accordingly gave judgment for the plaintiff for 165*l.* 17*s.* 1*d.*, with costs.

SALE OF FOOD AND DRUGS ACT.

NITROUS ETHER OR SWEET NITRE.

AT Dewsbury Police Court, on May 1, Arthur Banks, manager of Robert Town Co-operative Society, was summoned for selling spirit of nitrous ether not of the quality demanded. Inspector Newbould deposed to visiting defendant's shop on March 23. He saw an assistant, named Harrison, and asked for 3 oz. of spirit of nitrous ether. The assistant replied that they did not keep it, and witness asked what a certain bottle on a shelf contained. Harrison, without replying, served him with what he asked for, and charged 9*d.* The certificate of Mr. Allen, the public analyst, showed that the sample contained nitrous ether 0.41 per cent., alcohol 78.03, water 21.56. The analyst stated that the sample contained an excessive amount of water, and was deficient in nitrous ether, which was required to be in proportion of 1.9 per cent., even after having been kept for some time. In cross-examination, the inspector said he was certain that Harrison did not say the bottle contained sweet nitre. The inspector's assistant gave evidence, and at first described the sample as sweet spirit of nitre. The defence was that sweet spirit of nitre was sold, and not spirit of nitrous ether, and Mr. H. Broadbent, analytical chemist, who was called for the defence, stated that the analysis submitted was consistent with sweet spirit of nitre. The case was dismissed.

PRESERVED PEAS.

THE appeal in the case of *Grist v. Summers* was heard last week at the County of London Sessions before Mr. G. Soanes. Mr. Fenwick, at the Southwark Police Court, had convicted the defendant, and fined him 40*s.* and costs for selling preserved peas which contained .8 gr. of metallic copper to the pound, equivalent to 3.16 gr. of sulphate of copper. The defendant appealed. Mr. Richard Bodmin, public analyst for the St. Saviour's Board of Works; Dr. Thomas Stevenson, Dr. Leonard Wilde, Dr. A. P. Luff, Dr. F. J. Waldo, and Dr. James Herron, medical officer for the St. Saviour's Board, gave evidence intimating their opinion that peas contaminated with copper were injurious to health. For the defence, Dr. B. H. Paul, Dr. F. J. Smith, Dr. Hine, President of the Society of Medical Officers of Health; Dr. Bliss, senior assistant-physician at Middlesex Hospital; Dr. Walter Wynter, and Dr. Burney Yeo gave opinions to the effect that the use of copper in peas as in the sample was not in the least injurious to health; and Mr. Richard Bannister, deputy-principal analyst of the Somerset House Laboratory, explained the process by which he had analysed these peas, and by which he had found only one-half the quantity certified to by the public analyst. In cross-examination, Mr. Bannister admitted that the Somerset House certificates had been upset, but never when the Somerset House analysts had been in court to defend them. Ultimately the Court reserved judgment.

THE PHARMACY ACT.

THE PHARMACEUTICAL SOCIETY DEFEATED.

AT Leeds County Court, on April 29, before Judge Greenhow, the Council of the Pharmaceutical Society of Great Britain sought to recover a penalty of 5*l.* from Ernest Sleight, of 265 Hunslet Road, Leeds, who, it was alleged, sold, on January 30 last, poison in the shape of chlorodyne which contained morphine.

Mr. Arthur Foulds, who said he resided at Manchester,

gave evidence that, in consequence of instructions received from the Pharmaceutical Society, he went to 265 Hunslet Road, Leeds, on January 30 last. He saw a person behind the counter, and purchased from him a bottle of glycerine and a bottle of Towle's chlorodyne.

Mr. E. J. Eastes, F.I.C., said he analysed the contents of the bottle of chlorodyne, and found it to contain .7 gr. of morphine.

Mr. Sheppard, who appeared for the defendant, said that as this was an action for a penalty it must be strictly proved. His instructions were that the person now sued for a penalty of 5*l.* never was in the shop at all, as alleged in the evidence for the plaintiffs. The defendant did not work there, and so far as he knew he never saw the private detective before that day in court.

Ernest Sleight said he was an assistant. He had never served in his father's shop in Hunslet Road. On January 30 last he was at Burley Road with his brother, William Wilson Sleight. They were working there together all that day making neuralgia-mixtures. He was not in Hunslet Road at all that day, and it was not true that he sold the bottle of chlorodyne to Mr. Foulds on that day. He never saw him.

Corroborative evidence was given, and the Judge found for the defendant, with costs.

THE SALT UNION MONOPOLY.

IN the Court of Appeal on May 2 the case of *Deakin v. the Salt Union (Limited)* was heard on an appeal on behalf of the defendants. Mr. Deakin, in November 1888, sold his business as a salt-producer to the Salt Union, and they entered into an agreement with him providing that the Salt Union should supply him with salt at the same price as they supplied salt to other "distributors." In February 1889, however, the Salt Union entered into an agreement with the Runcorn Salt and Alkali Company, and subsequently, in accordance with that agreement, sold salt to that company at lower rates. Mr. Deakin discovered this and brought an action for damages for breach of contract, and in August 1893 the case was referred to the Official Referee. His decision on one question was taken to the House of Lords, which held, in February 1894, that there had been a breach of contract by the defendants. The matter then went again before the Official Referee, who found for the plaintiff for nominal damages. The plaintiff claimed in respect of each ton of salt the amount of difference between the price of the salt sold by the Salt Union to the plaintiff and the price at which salt was supplied to the Runcorn Company. He estimated his claim to amount to some 50,000*l.* A divisional court held that the plaintiff was entitled to substantial damages, and ordered the case to go again before the Official Referee. Against this decision the defendants appealed, and Lord Justice A. L. Smith, on behalf of the Court of Appeal (Lord Justice Rigby dissenting), now found that the plaintiff had failed to show that he had sustained any loss by being charged 7*s.* 6*d.* instead of 5*s.* per ton for the salt supplied to him. The plaintiff got the 7*s.* 6*d.* per ton out of the public, and, therefore, he had not lost anything in the sense that he would have lost if he had paid an excessive railway rate. He was not entitled to recover 50,000*l.*, or any other sum, and therefore the appeal would be allowed, with costs there and in the court below.

Bankruptcy Reports.

Re ARTHUR JOHN CONROY, Boscombe, Chemist.

THE public examination of this debtor was held before Mr. Registrar Dickinson at the last sitting of the Poole Bankruptcy Court. The statement of affairs filed by the debtor disclosed liabilities amounting to 1,751*l.* 16*s.* 8*d.*, of which 1,069*l.* 6*s.* 3*d.* was expected to rank, and assets estimated to produce 281*l.* 7*s.* 3*d.* The debtor, in reply to the Official Receiver, said he commenced business about two years ago with borrowed capital. He was questioned with regard to money lent by a lady, for which he agreed to pay 5 per cent. interest. Subsequently he was pressed for security, and as he was unable to give any, he was told he must either give a bill of sale over the whole of his effects, or have a writ issued

against him for the recovery of the money. He thought it best to give a bill of sale, which included all his stock and fixtures. The furniture in his house belonged to his wife. The bill of sale was given for a past debt. He admitted that, taking into consideration the money advanced to him, he had been practically insolvent ever since he had been in business. The examination was concluded.

Re HENRY FOSTER, Preston, Chemist and Druggist.

THE public examination of this debtor took place at the Preston Bankruptcy Court on May 1. The statement of affairs showed liabilities amounting to 1,924*l.* 10*s.* 6*d.* gross; expected to rank, 924*l.* 10*s.* 6*d.*; assets, 255*l.* In reply to the Official Receiver, the debtor stated that he originally commenced business in March, 1849. He borrowed enough money from friends to purchase the stock of the late Mr. Talbot, whose servant he had been, and who was retiring. In 1866 he arranged with his creditors, but he did not remember how much he paid in the pound. He brought 75*l.* to his solicitor for the composition. Some of the creditors were paid in full. In 1878 he filed a petition for liquidation. He never had a partner in his business, but his two sons entered into a sort of partnership with him. There was no deed of partnership, and they brought no capital into the business. They received wages when there was money to pay them. The Registrar remarked that such an arrangement could not be considered a partnership. The debtor said his liabilities in 1878 were 1,157*l.* 16*s.* 7*d.*, and the total assets 287*l.* He got his discharge in 1880. He had mortgaged his property in Friargate to a gentleman in Fulwood for 900*l.*, and there was a further mortgage to a lady living at Poulton for 100*l.* With the 500*l.* he paid off the Preston Building Society, who had the mortgage previously. He believed the property was worth 1,000*l.* He had kept no books, and could not make out a trade and profit-and-loss account. He had lost 2,000*l.* in the last ten years—a good deal in law costs. In reply to Mr. Cooper, the debtor said no stock had been removed from his place since the petition was filed. He tried to buy two shops in Heathley Street not long ago; he had been trying to buy them for the last fifteen years. A gentleman had promised to lend him the money at 4½ per cent. The examination was adjourned.

Re JOSEPH PARKINSON, 94 High Street, Cowes (Isle of Wight), Chemist and Druggist.

THE public examination of this bankrupt took place at Newport on April 27, before Mr. Registrar E. A. Blake. The debtor stated, in reply to the Official Receiver, that he commenced business on his own account in the Isle of Wight on May 5, 1894, having previously managed a pharmacy at Bournemouth for Mr. Worth, while previous to that he was manager for Messrs. Davis & Sons, London. He had also been in business at Coventry, where he got into financial difficulties. He purchased the Cowes business from Mr. Longman for 450*l.*, 200*l.* being paid down, 50*l.* in a month, and 50*l.* a year afterwards. There was no formal agreement. He only came to Cowes on one day to see the business, and Mr. Longman told him he had not kept any books. Questioned how he satisfied himself about the value of the business, debtor replied that he took Mr. Longman's word for it. There was no valuation of the stock, and he did not go carefully through it. He made some sort of calculation in his own mind as to the value of the stock, but he found that a lot of it was worthless. He estimated the value of the goodwill at 200*l.*, and the stock should have been worth the other 250*l.* He paid the 200*l.* down, and that he had earned himself. About six weeks afterwards he paid another 50*l.*, which was the premium he received for an apprentice, who had since left of his own free will. He arranged to pay 50*l.* every May. Mr. Longman had written for his money, and debtor had replied stating that it was impossible for him to pay. He had also told Mr. Longman of the condition of the business, and his reply was that when the season came he would do an immense business. The season, however, was a very bad one. Mr. Longman had represented the takings at 675*l.* a year, but he had taken just over 300*l.* The Registrar: The man who tells you his returns are 670*l.* does one of two things.

Either he had books to show it, or else he guessed at it; and that would have been a funny sum to guess at. Continuing, debtor stated that from May, 1894, to March, 1896, he had taken 614*l.* 11*s.* 7*d.* He had informed Mr. Longman that he had misrepresented the value of the business. He had told Mr. Longman that he was willing to give him the business again if he would pay the debts, but this he declined to agree to. Since he had been in the business he had only made a profit of about 160*l.*, and that had been expended on housekeeping. The gross profit he could make was 33 per cent. The Registrar said he should have thought a man of debtor's age and experience would not give 450*l.* for a business without having the returns proved. Debtor said he held the premises for a residue of a lease of about four years, and the rent was 50*l.* a year. He had no furniture of his own, as it was his wife's prior to marriage. He had kept a day and cash books and a ledger. The stock was more valuable now than when he took it, and he should consider he had expended from 100*l.* to 120*l.* on stock, including replacing the goods he had sold. The Registrar: From your evidence it was a frightfully bad bargain? Debtor: It was; and to that I attribute my present state of affairs. Continuing, debtor stated that he was not pressed by creditors till the end of last year. He called a meeting of creditors, and agreed to pay so much in the pound every quarter; but it was made so much every month, and he could not make the first payment. During March his gross takings were 11*l.*, and in February 15*l.*, and he had to keep a wife, one child, an apprentice, a girl, and himself. Eventually the examination was closed.

Re HENRY MARKS, late of 46 Artillery Lane, Bishopsgate Street Without, Patent-medicine Proprietor.

THIS bankrupt was examined at the London Bankruptcy Court on May 1, before Mr. Registrar Brougham. His accounts show unsecured liabilities 2,572*l.* 15*s.* 10*d.*, and assets *nil*.

Questioned by Mr. E. L. Hough, Official Receiver, the bankrupt stated that in February, 1894, he opened a factory at 6 Artillery Street, now known as 46 Artillery Lane, for the manufacture of "Marks' Gout and Rheumatic Cure." Before that he was a gout-specialist, by which he meant that he had cured gout by a secret process. He had experimented for thirty years, and had spent 20,000*l.* upon the cure. His idea in opening the factory was to make the medicine in large quantities, and place it on the market. The venture would have been a success but for the creditors coming down upon him too soon. Of the present liabilities, 1,700*l.* were in respect of advertisements. Three-fifths of the total indebtedness was contracted between February, 1894, and the following August, when he was obliged to call his creditors together. The result of that meeting was the appointment of a committee to superintend the business. Witness agreed to assign his interest in the patent to the chairman of the committee in the belief that he did so for the general benefit of the creditors; but the chairman, who was also the landlord of the premises, took a different view of the matter, and having paid certain wages and rates, and being a creditor for rent, seized and claimed the patent as his own. Witness acted as manager until December last, when the landlord turned him out. Since then he had acted as a gout-specialist, as he did before starting the factory. He attributed his failure entirely to pressure by creditors before the benefit of the advertisements could be reaped. Witness was still making use of the medicine, which he had recently improved. He had made it nice instead of nasty. He contended that he was entitled to use the patent in spite of the assignment, because the landlord had broken his share of the agreement. Just prior to the failure, witness attempted to form a company to take over and work the patent. He spent about 90*l.* in the attempt, which was not successful.

The examination was concluded.

Re ROBERT WALTER MORRIS, 27 Elder Street, Edinburgh, sole and only known partner of Dunn & Co., Wholesale Manufacturing Chemists.

THIS bankrupt appeared at the Edinburgh Bankruptcy Court on Monday for further examination. The trustee

stated that the bankrupt had made a proposal of composition, the terms of which had only to be adjusted. Until that was done he did not wish to close the examination, and he therefore proposed that it be further adjourned till May 18. The Sheriff granted an adjournment.

Gazette.

PARTNERSHIPS DISSOLVED.

Botwood, C. W., and Acton, G. H., under the style of Botwood & Acton, Rochester and New Brompton, Kent, dentists.

Doble, H. T., and Doble, R. D., under the style of H. T. Doble & Son, Tavistock, chemists and druggists.

Hicken, H., and Pyefinch, J., under the style of Hicken & Pyefinch, Shrewsbury, chemists and druggists.

McNicoll, J., and Carrington, G. H., under the style of McNicoll & Carrington, Poole, physicians, surgeons, and general medical practitioners.

Merson, G. F., and Forbes, R. T., under the style of Merson & Forbes, Newcastle-upon-Tyne, chemists.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDER.

Dixon, Elizabeth, a married woman carrying on business separately and apart from her husband, Shrewsbury, aerated-water manufacturer.

ADJUDICATION.

Barron, William, the younger, Cheltenham, chemist and druggist.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Collier, George Henry Christian, Chingford, mineral-water manufacturer—discharge suspended for two years ending January 13, 1898.

Deed of Arrangement.

Holden, William Henry, 58 Castle Road, Scarborough, medical practitioner. Trustee, William B. Robinson, Woodlands Farm, Scally Road, Scarborough, dairyman. Dated April 23; filed May 2. Liabilities unsecured, 387. 0s. 6d.; estimated net assets, 507. Composition of 5s. in the pound, payable by two equal instalments at six and twelve months from date hereof, secured by assignment, with a proviso that if debtor should recover damages under an action now pending in the High Courts of Justice, such damages to be applied, after the payment of the costs incurred, towards augmenting the aforesaid composition (not exceeding 10s. in all). The following are scheduled as creditors:—

	£	s.	d.
Bampfild, Rev. G., Barnet	31	0	0
Cleminson, Michael, Bishop Auckland	32	0	0
Dale, Smith, G. & Sons, Scarborough	13	0	0
Fearnhead, Josh., Bolton	95	0	0
Grayston & Catt, Scarborough	15	0	0
McCartan, John, Durham	35	0	0
Ramsdan, A. (Limited), Scarborough	44	0	0
Tonks, J., & Sons, Scarborough	13	0	0

Trade Notes.

THE Sharp Brothers Soap and Perfumery Company (Limited), of 18 and 19 Red Lion Square, have just published a new price-list of toilet-soaps, perfumery, and toilet goods.

AN announcement appears this week from which we learn that Clarke's Pyramid and Fairy Light Company have planned a scheme to give an annual bonus to vendors of their lights who will signify their adherence to the minimum retail prices fixed by the company. A bonus voucher will be given with each six boxes of "Pyramid" lights, and this will be redeemable annually to all who agree to sell at the prices fixed, and who keep their agreement.

MESSES. J. RAPHAEL & CO., manufacturing opticians, of 13 Oxford Street, W., are to be dispossessed of their premises at that address by the Central London Railway. They are removing this month to 51 Clerkenwell Road, but first

they are clearing their stock of spectacles, field and opera glasses, thermometers and barometers, at reduced prices.

IT will be noticed from an advertisement which appears for the first time this week that Mr. Percival Turner, medical and dental transfer agent, 4 Adam Street, Adelphi, has added a department of chemists' transfer agency to his business, which he has placed under the management of Mr. Frederic Durant, pharmaceutical chemist, late of 137 Queen's Crescent, N.W.

PHARMACISTS have an interest in the development of Röntgenography. This especially applies to those who have close relations with medical men. They can strengthen these relations by assisting their clients in the diagnosis of cases by undertaking the electrical and mechanical arrangements necessary in taking skiagraphs. We noticed the other day that a chemist in the far-away town of Alth had been asked by a medical customer if he could help him with a bone case, and the chemist rigged up an apparatus and soon had the case skiagraphed. It is a good thing for a man to be able to do that sort of thing, but all have not the time or ability, and for such we would cordially commend the apparatus offered by Messrs. Reynolds & Branson, of Leeds, who were amongst the first to recognise the importance of Röntgen's discovery in its applications to surgery. The apparatus is moderate in price, does not require special skill in working, and gives excellent results. We have two examples of the work before us: a skiagraph of the foot, and a lantern-slide of a foot showing a needle embedded near the toe. These are not a bit inferior to the Swinton and Rowland skiagraphs referred to elsewhere in this issue. We ought to make it clear to those who have never seen a skiagraph taken that the operation is much simpler than photographing; there is no focussing, &c., to do. In connection with this matter, we may mention that Messrs. B. J. Edwards & Co., of Hackney, are making special "cathodal plates" which are rendered highly sensitive to the x rays by having a fluorescent substance incorporated with the emulsion, and this has the effect of shortening the exposure. These plates do not require special treatment in developing; it should simply be slow, and with a weak developer.

MESSES. BURROUGHS, WELLCOME & Co. send us some new tabloids. The first of these is an effervescent citrate-of-lithia preparation, containing 4 gr. of the citrate combined with about 3½ gr. of effervescing material. These tabloids are nicely compressed, for while they dissolve in cold water with a brisk effervescence, on the tongue they do not disintegrate, but vanish slowly and steadily, creating a pleasant oral sensation. In the case of such a remedy as lithium citrate, it is obviously advantageous to have it in such a form as this, so that it can be carried about by the patient, to be taken at any time. An equally necessary requirement is that the preparation should be free from sugar, and we have been careful to determine that in this respect the tabloids are quite unobjectionable, nor is there a trace of glucose or any other carbohydrate detectable in them. The second tabloid is also a lithium one, the salt being the bitartrate (5 gr.), in which the acid as well as the baryons radicle plays a part in the removal of excess of uric acid from the system. A third tabloid is one of purified oxide (1 gr.). This we find to be a bile of exceptional purity, so compressed as to be practically in powder form. These tabloids are coated with keratin, and are distinctive in shape, being somewhat flatter than tabloids are generally made. The keratin coating prevents solution of the tabloids in acid menstrua, we find, but it readily and quickly dissolves in alkaline fluids, so that the action of the bile will be reserved until the tabloids reach the intestinal tract where it is really required. The firm tell us of a use for oxide which is not generally known—viz., that it is an effective vermifuge in *Ascaris lumbricoides*. The firm are also making tabloids of "pancreas substance" (by which we understand the gland, and not its secretion), which has lately come into favour in the treatment of diabetes. These also are keratin-coated, as the "substance" is not wanted in the stomach. The bringing of these four tabloids together is highly suggestive of the direction in which therapeutics tends in these days. Of the four, two are animal products, both very old-fashioned remedies; yet their administration is sanctioned—nay, urged—by modern scientific research.

Telegrams: "SANITAS LONDON." Registered Trade Mark: "SANITAS."

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Analytical Department for Disinfectants, Waters, Sheep Dips, and Sanitary Preparations.

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"Sanitas-Eucalyptus" Preparations, &c.

"Creocide" and Carbolic Disinfectants.

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N.B.—Copyright Book, "How to Disinfect," sent free.

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"Absolutely Pure."—
A. URE, M.D., F.R.S.,
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Analytical Chemists.

"The water is of exquisite organic purity, and the quality of the gas is excellent."—J. ALFRED WANKLYN, M.R.C.S., Prof. of Chem.

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PUREST IN ENGLAND.

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Supplied in Six Dozen Cases,
Carriage Paid, by

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And of all Chemists, Wine Merchants, Hotels, &c.



MÖLLER'S HYDROXYL-FREE OIL.

"The Lancet," June 8, 1895.

"It is now known that Cod-liver Oil can be prepared not only free from objectionable taste, but also from the tendency to cause unpleasant eructations. . . . The first improvement was effected on the introduction of **PETER MÖLLER'S PROCESS**, which, when properly carried out, produces an oil free from repulsive taste, but still not from the tendency to set up irritation in the stomach with eructation as a sequel. . . . The latter very disagreeable property has been removed by **MÖLLER'S NEW PROCESS**."

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No. 1 Finest Pure CRUSHED LINSEED	17/ cwt.	Finest Pure STARCH POWDER	23/ cwt.
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*CARRIAGE PAID to Railway Stations within 200 miles of London (or allowance made for distances beyond) on a total weight of 112 lbs. and upwards of above articles. Smaller parcels delivered free on rail London at above prices.

A BRIGHT "The Chemist and Druggist,"

THE FRAGRANCE OF **COMPRESSED FLOWERS,**

A Good Line for all seasons.

T. HOWARD LLOYD & CO.,
86 High St. & Town Hall Lane,
LEICESTER.

SEE
September 21, 1895.

IDEA



Vibrona Retail price, 4/- per bottle; 45/- per dozen.
Trade Terms:—Less than one dozen, 40/- Net.
Cases of one dozen, 36/- Net.

The Ideal Tonic. **United Kingdom**:—Carriage paid on three cases.
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Fletcher, Fletcher & Co., Holloway, LONDON.

ON THE WRONG SIDE.

THE report which the Pharmaceutical Council submits to its adherents this year is more prosaic than usual, and must be taken along with the financial statement before the significance of it can be perceived. The first paragraph dealing with finance puts the Society's present condition pleasantly enough,

but it is necessary to go a little further, and any person who has taken pains to follow the regular monthly statements will be quite prepared to hear that the annual statement shows a large balance on the wrong side. The actual revenue of the Society during 1895 was 18,055*l.* 3*s.* 9*d.*, while the expenditure was 21,800*l.* 9*s.* 10*d.*, showing a deficit of 3,745*l.* 6*s.* 1*d.* If the items of expenditure are looked through it will be seen that there are two which are not likely to occur again—viz., about 1,150*l.* spent on the Edinburgh house, and 1,053*l.* on decorating and repairing the London premises—the latter nearly double the amount usually spent annually in that way; so that we may take it that about 1,600*l.* of last year's expenditure will not occur again. This still leaves 2,100*l.* of a deficit to be wiped off, and as the Council has borrowed 1,500*l.* from the bank, it is natural to ask where the money is to come from to meet these liabilities? The Society's important sources of revenue are from subscriptions of members, &c., and examination-fees. It has no immediately realisable securities except the Paddington ground-rents, which are too good a thing to part with. The interest on investments is a mere pittance—some 353*l.*—and may be left out of the reckoning, so that the two sources above-mentioned afford the only reliable income. Of course, there is the Society's journal, but it will be seen that it is really to maintain it that the money is required, the loss upon it last year having been 2,761*l.* 8*s.* 4*d.*, and with postage 3,599*l.* 10*s.* 2*d.*, or nearly 12*s.* 6*d.* for each apprentice, associate, and member of the Society. In view of the present apparently large surplus from the examinations—last year the Society received 8,700*l.* in fees and spent a little over 3,500*l.* in immediate examination-expenses, leaving over 5,000*l.* of a surplus—the Council can scarcely have the hardihood to again seek relief in that direction, nor, so far as membership is concerned, can an accession reckonable by the thousand be counted upon. It seems to us that the only direction in which the Council can turn to get the means to wipe off the deficit and meet future liabilities is to appeal to the members. Anyone who will take the trouble to pick out from the expenditure column the items solely pertaining to the Society—such as the Library, Museum, School of Pharmacy, Research Laboratory, and matters contingent thereto—will see that they amount to 2,400*l.*, or half the receipts from the Society's adherents, and this before a penny is spent upon rent, offices, and the other things. Some of the latter expenses must be charged to examinations, but even although the whole of them were so allocated, the fact remains that the Council spend upon the members in one way or other more than is received annually in subscriptions and interest. The examination-fees supply the deficiency, but although the large surplus from that source has proved inadequate for the purpose, it cannot for a moment be supposed that the Council will once more ask the sanction of the Privy Council to raise the examination-fees. The only thing left to the Council, therefore, is to appeal to the members themselves—to those who are getting these large benefits—to accede to an additional tax. A subscription of 30*s.* a year from members and associates in business, and one of a guinea a year from associates and apprentices, would yield the Society about 2,500*l.*, or a comfortable margin beyond what is required to make both sides of the account square. Surely there is no loyal adherent of the Society who would refuse the extra half-sovereign to take the Council out of their difficulties.

BROKERS AND ARBITRATIONS.

THE recent judicial decision in the case of *Domeier v. Treatt* has caused much searching of heart among the members of

the General Produce Brokers' Association of London. At present all drugs changing hands in Mincing Lane are bought and sold subject to certain stringent conditions framed by the Brokers' Association in the interest of its members. Theoretically, it is, of course, to open to a buyer and seller to make a contract subject to any conditions upon which they may be able to agree, but in practice there is no escape from the one official contract-form. It is fair to say that, upon the whole, the system works well, except for a single, but most important, clause, which refers to the settlement of disputes. Under that clause all disputes must be referred to arbitration in accordance with the rules of the Association, each party appointing an arbitrator, who must be a broker and a member of the Association. If the arbitrators disagree, they select another broker as umpire. There is an appeal from this first set of arbitrators to the committee of the Association; but in no case is it possible, under the rules, to appoint as an arbitrator a non-broker, however impartial and experienced. It has hitherto been quietly assumed that this Mincing Lane Court of Arbitrators constitutes a kind of legal *Imperium in Imperio*, equal to any regular court of justice. Baron Pollock and Mr. Justice Day have somewhat rudely dispelled this delusion, and the brokers now desire to re-cast their contract-rules so as to prevent future reversals at law of their decisions. With that object in view the Association has issued the following circular-letter to its members:—

GENERAL PRODUCE BROKERS' ASSOCIATION OF LONDON.

Established 1876.

B Staircase,
Commercial Sale Rooms,
Monday, 27th April, 1896.

DEAR SIRS,

It having become necessary to alter Rule VII. (the rule governing the arbitration-clause in the contracts) on the back of the Contract Forms issued by this Association, so as to conform with present requirements, on behalf of the Committee I beg to hand you proof copy, showing the alterations which are proposed, and I shall be glad if you will give the same your careful attention and perusal.

Should you have any suggestion to make, please let me have it within seven days, as the Committee propose to call a General Meeting to confirm the new form.

(Signed) R. J. HOSSACK,
Secretary.

So far as we can make out, the only important alteration which it is proposed to make in the rules is to substitute words to the effect that the decision of the arbitrators "*shall be irrevocable, and it, and the award to be made in pursuance thereof, shall be enforceable under the provisions of the Arbitration Act, 1889,*" for the present wording, "*Any award . . . shall be absolutely final and binding on both parties, and this submission and such reference shall be subject to the provisions of the Arbitration Act, 1889.*" What the produce-brokers can hope to gain by substituting a declaration of irrevocability for one of absolute finality we fail to understand. The law remains, no matter what solemnity of asseveration the brokers may resort to, and the law, as was shown in the citronella-oil case, is by no means favourable to the occult influences that notoriously pervade the air of Mincing Lane arbitration-rooms. The proposed substitution of tweedledum for tweedledee is only another instance of the reactionary tendencies of the Brokers' Association. For years it has been a grievance with the vast majority of the Mincing Lane drug-merchants that only brokers are eligible as arbitrators. It is notorious that disputes constantly arise in which the presence of a merchant, a manufacturer, a lawyer, or an analyst upon the Arbitration Board would be of great advantage; and we hope we shall not be thought wanting in respect for an

eminent fraternity if we hint that brokers are not always possessed of a reasonable elementary knowledge of the articles upon which they are called to arbitrate. Furthermore, the Mincing Lane organism is complex. There are wheels within wheels, and it is whispered that there have been cases in which disputants were merely "men of straw" of the brokers whom they appointed to arbitrate on their behalf, or *vice versa*. For these and many other reasons there is a widespread distrust of the present arbitration system, and the sooner the oligarchy that controls it opens its doors to some of the Mincing Lane "Uitlanders" who do the bulk of the business, but are now without voice in the settlement of their "undoubted grievances," the better. We are, therefore, glad to hear that the London Chamber of Commerce propose to call a meeting of members connected with the drug-trade to discuss the arbitration question, and we urge all those who desire a fairer way of settling disputes to be present at that meeting.

COMBINING OR CONSPIRING.

By a coincidence we reported last week a judicial decision in France and a counsel's opinion in England in regard to combinations of traders to keep up prices of proprietary articles. French law and English law, as interpreted by these authorities, seem to be diametrically opposed the one to the other in this respect, which is not unlikely. The case decided in France was one which had been pending for some years, and the judgment appears to be a far-reaching one. The dealers in natural mineral waters at Lyons, many of whom are chemists, formed a syndicate among themselves in 1891, with the object of fixing a fairly remunerative retail price for these goods and to gain a monopoly. To secure this result the syndicate made contracts with the proprietors of certain springs, which ensured to them the sole supply of their waters. The excluded dealers appealed to the law, and in the end successfully, the syndicate being ordered to pay a 4% penalty for infringing the law and 400% damages to their injured competitors. One point of importance, which is not clear from the report we received, is whether the plaintiff-dealers could have joined the syndicate if they had chosen to agree to their conditions. In other words, we are not at present quite sure whether the French judgment was based on the attempt to maintain prices, or on a scheme to prevent certain persons from carrying on a legitimate business.

The counsel's opinion obtained in this country to which we refer is that which has been sought by the Proprietary Articles Trade Association, and which it was stated at the South Kensington meeting had been received. The committee of that Association have not seen fit to publish either their inquiry or the opinion given in reply; nor do they state who is the luminary on whose advice they rely. We understand, however, generally, that he makes it clear they can go forward without fear of legal consequences with the scheme they have outlined—that is, that dealers may legally effect a treaty with manufacturers, whereby the latter shall bind themselves not to supply certain articles to persons who will not undertake to sell them at prices which have been agreed upon.

We can hardly see that there need have been sufficient doubt in regard to the legal position of a trade combination to necessitate recourse to counsel. The matter was very fully discussed, some years ago, in the case of the Mogul Steamship Company *v.* McGregor, and the result arrived at was that an association formed to keep trade in its own hands, and not with the intention of ruining the trade of a

rival, or from any personal malice or illwill towards such rival, was not unlawful, and that no action for conspiracy was maintainable. This was the view taken by Lord Coleridge in the Court below, and it was supported by the Lords Justices Bowen and Fry in the Court of Appeal, but Lord Esher, the Master of the Rolls, dissented from it. It is to be regretted that the case was not carried to the House of Lords, so that there might have been a final settlement of the matter, especially as, from the fact that Lord Esher dissented from the judgment, it may be inferred that the law was not altogether clear on the point, and that the line of demarcation between what is legal and what is illegal on such matters may be very easily overstepped.

The circumstance which led to the case above referred to was the issue of a circular by the defendants, dated Shanghai, May 10, 1884, offering a rebate of 5 per cent. to exporters who would undertake to confine their shipments of tea and general cargo from China to Europe (not including the Mediterranean and Black Sea ports) to the P. & O. Steam Navigation Company, Messageries Maritimes Company, Ocean Steamship Company, Glen, Castle, Shire, and Ben lines, and to the steamships *Oopack* and *Ningchow*. Exporters claiming the returns were to sign a declaration that they had not made nor been interested in any shipments of tea or general cargo to Europe (excepting the ports above named) by any other than the said lines. The rebate was to be paid half-yearly, and shipments by an outsider steamer during the six-monthly period were to exclude the shippers from participation in the rebate.

The case was argued on behalf of the plaintiffs by Sir Henry James and two other Q.C.'s, one of whom is the present Mr. Justice Barnes, and on behalf of the defendants by Sir Charles Russell, Sir Horace Davey, and the present Solicitor-General, so that there was a great array of legal talent on both sides, and it may be taken that the matter was thoroughly threshed out.

The plaintiffs alleged a conspiracy on the part of the defendants to prevent them (the plaintiffs) from obtaining cargoes, or in the alternative a conspiracy to injure the plaintiffs. The arguments appear to have turned principally on whether it was a combination in restraint of trade, and therefore illegal on the ground of public policy, and the Court found, as we have already stated, that it was not of that character.

It has sometimes been asked whether chemists can form themselves into a trade union, and thus get the benefit of the laws which protect those combinations from interference, and there is an impression among a good many people that such association is only available to artisans. That impression is, however, erroneous. The definition of a trade union is contained in the Trade Union Act of 1876, and is extremely wide. Section 16 of that Act defines a trade union as follows:—

The term Trade Union means any combination, whether temporary or permanent, for regulating the relations between workmen and masters, or between workmen and workmen, or between masters and masters, or for imposing restrictive conditions on the conduct of any trade or business, whether such combination would, or would not, if the principal Act had not been passed, have been deemed to have been an unlawful combination by reason of some one or more of its purposes being in restraint of trade.

The principal Act regulating the formation of trade unions is the "Trade Unions Act of 1871," under which any seven or more members of a trade union may, by subscribing their names to the rules of the union, and otherwise complying with the provisions of the Act, secure legal registration as a trade union.

HERBERT SPENCER ON THE METRIC SYSTEM.

Messrs. Williams & Norgate will shortly publish a reprint with appendices of three letters which Mr. Herbert Spencer has lately written to the *Times* against the adoption of the metric system. The articles appeared anonymously, and a good many people wondered how it happened that such moonstruck arguments got such prominence in the leading journal. The authorship explains the mystery. Mr. Spencer advocates the reorganisation of our system of numeration on the duodecimal basis, in preference to the reorganisation of our weights and measures on the decimal system.

AMMONIATED MERCURY.

The Austrian Pharmacopœia, like others, gives the formula of white precipitate as HgNH_2Cl , which requires, says W. Schieber in the *Oesterr. Zeit. für Phar.*, 79.5 per cent. of Hg, but it is exceedingly difficult to get it to contain so much. A sample, made according to the Ph. A. method by himself, yielded only 73.5 per cent. Hg, a commercial sample 76.2 per cent., and one prepared as Professor E. Schmidt directs yielded 76 per cent. The fact of the matter is that white precipitate contains more or less water, 1 to 10 per cent. being allowed by various competent observers. The British Pharmacopœia, we may add, requires the compound to "yield 77.5 per cent. of metallic mercury," but does not say how the fact is to be determined. The process used by Schieber was Glücksmann's, described in a previous number of the *Zeitschrift*, for estimating the mercury in tannate of the metal. The white precipitate was dissolved in a sufficient excess of hydrochloric acid, the clear solution treated with barium-hypophosphite solution, and the amount of mercurous chloride formed estimated by titration with decinormal potassium iodide, as suggested by Hempell. This process seems to be one worthy of trial by pharmacists as well as the point regarding humidity of white precipitate.

THE SHOPS (EARLY-CLOSING) BILL.

The chances of this Bill have been rapidly diminishing since its triumphant passage through the Grand Committee. It is believed that the House of Commons would vote for it by a good majority if a division could be reached, but its opponents are very much in earnest, and they will hardly allow this result to be attained. The discussion of the Committee's report is set down for June 10, and it is a rule of the House that Bills which have passed the Committee stage have precedence over others after Whitsuntide. Mr. Balfour has mercifully left two Wednesdays after Whitsuntide for private members' measures, and if the House should adjourn over Derby Day the Early-closing Bill may be heard of. But this is by no means certain, and if the first Wednesday after Whitsuntide (June 3) should find the House sitting, the Benefices Bill is likely to get a start, and the Early-closers may put up their shutters for this year.

The Carriage of Liquids by Sample-post.

THE Post Office regulations forbidding the carriage by sample or letter post of liquids, greases, and oils have long been a serious cause of vexation to traders, especially to those dealing in produce with foreign countries. Commercial transactions often depend for their success upon the cheap and prompt transmission of samples, and as almost all foreign post-offices permit the carriage by sample-post of the substances referred to packed in ordinary glass vials, or in boxes of cardboard, wood, or metal, British merchants are placed at a serious disadvantage. The London Chamber of Commerce is taking steps for the removal of that grievance, and with that object in view meetings of the

various committees have recently been held to discuss the matter. The Chemical Section met for this purpose on Tuesday, Mr. Thomas Christy being voted in the chair, on account of the temporary absence of Mr. T. Tyrer, the chairman of the committee. There was a small attendance, including Mr. Samuel Lambert, Mr. Bennett (Sir J. B. Lawes & Co.), Mr. Hildesheim (Tompkins, Hildesheim & Co.), Mr. C. Gross, Mr. A. Domeier, and a representative of Messrs. H. Fehr & Co. Several of those present brought with them samples of packages in which liquids are carried by the foreign post-offices, and an interesting collection of those is now on view at the offices of the Chamber. The discussion was quite informal, and, upon the proposition of Mr. S. Lambert, seconded by Mr. A. Domeier, a motion was carried to approach the Postmaster-General in order to obtain his consent to the waiving of the G.P.O. rule forbidding the sending of glass by post, and announcing that the Chemical Section was prepared to submit to the Post Office suitable packages, in which samples of liquids and greases could be safely carried. The suggestion which seemed to commend itself most generally to the meeting was that the Post Office, after examining the specimens of packages used abroad, should select one combining cheapness with a reasonable guarantee of safety, and adopt that package as a standard, to be sold in different sizes at cost-price or thereabouts at the various post-offices. Among the samples shown was one extensively used in America; and Mr. Lambert pointed out that his firm were constantly receiving from the States samples of oils put up in such packages, the Post Office here making no difficulty in delivering those samples, while they declined to accept by sample-post the same packages containing liquids if posted back to the States from an English post-office. The American sample is simply a hollow cylinder of light wood closed with a light metal screw-top, within which a glass bottle can be transmitted without any risk. The package has been officially accepted by the U.S.A. Post Office, and a certificate to that effect is printed on the cylinder. Another sample consisted of a paper box composed of ribbed cardboard covered with light waterproof paper, in which also a bottle would fit tightly; and a third of a small rectangular wooden container, with a wooden lid turning on a metal pin and kept in its place by a piece of metal inserted in the wood. Another apparently safe mode of package came from Germany. It consisted of a white cardboard box, about 8 inches by 4 inches, with convex top and bottom, the frame of the box being lined with wood, and the vial protected by wadding. The meeting further occupied itself with a discussion as to the desirability of obtaining assistance from the G.P.O. in the matter of sending parcels to South and Central America. It is suggested that the shipping companies should be approached with a view of systematically collecting samples at Liverpool, carrying them to the various ports, and there delivering them to the local post-offices for further distribution. Another question mentioned was that relating to the proposed alteration of the contract-form in the official contracts of the General Produce Brokers' Association. A reference to this will be found under the heading of our Trade Report. Mr. Christy also called attention to par. 10 of the G.P.O. Regulations in the "Postal Guide" stating that no advertisement, decoration, or other printed matter (except the address) is permitted on the right-hand half of the address side of the covers of letters and book-packets. The Post Office are about to ask all houses of business to send in the particulars of the number and specimens of the covers and envelopes in their possession. They will allow them to use their present stock on condition that they agree to print no more that will be contrary to the paragraph in question.

DR. SAMUEL T. KNAGGS, editor of the *Australasian Medical Gazette*, will shortly appear before the public as the author of a volume of fiction. The title of his forthcoming work is "Dr. de Lion, Clairvoyant: being the Confession of a Vagabond Life in Australia." The book will be published in Britain by Messrs. Gay & Bird.

AN APPROPRIATE NAME.—Miss Kate McPhial is a graduate in pharmacy, in practice at Osseo, Wisconsin.

Royal Society Conversazione.

THE first of the two *conversazioni* given by the Royal Society annually was held at Burlington House on Wednesday evening, when Sir Joseph Lister, Bart., the President, received a distinguished company, which was exclusively of the sterner sex. As usual on such occasions the scientific exhibits were the chief attraction, and this week there were several things shown of special interest to pharmacists. Specimens illustrative, in a sense, of

PHOTOGRAPHIC METHODS

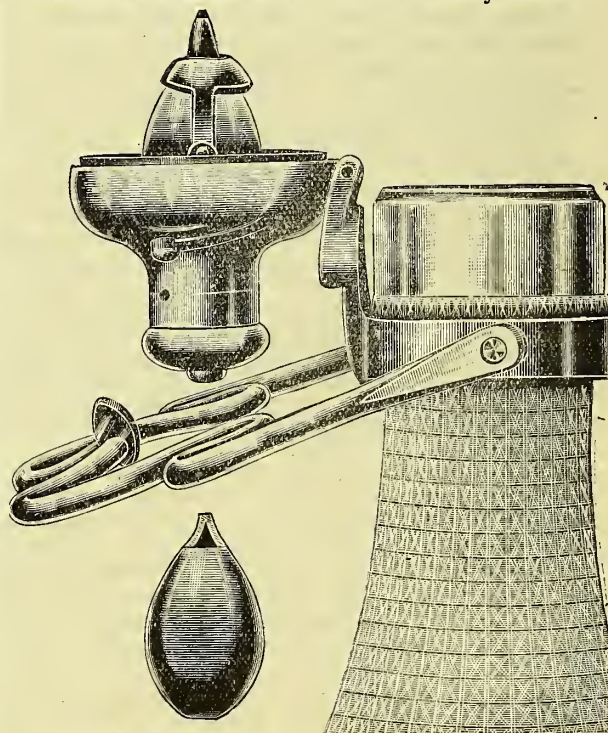
were particularly noticeable, and Röntgen-ray photography was in force. Mr. A. A. C. Swinton was given the whole of the officers' room for a practical demonstration, in the course of which the visitors got their hands, &c., skiagraphed, and the results exhibited on the "while-you-wait" principle. He also gave lantern-demonstrations, and visitors were free to examine their own bones by means of the cryptoscope—*i.e.*, the fluorescent screen. This was made of an ordinary stereoscope-case, the larger end of which was fitted with a piece of cardboard, painted with barium platinocyanide mixed with gum-water, the hand being placed upon the aluminium window of a box, beneath which a Crookes-tube was placed. Mr. Swinton showed many interesting skiagraphs, including one of Lord Salisbury's hand, the only peculiarity of which was that the joints showed a slight tendency to gout. Mr. Sydney Rowland's collection of skiagraphs was exhibited in the Council-room. These were chiefly intended to show the applicability of Röntgenography to surgical diagnosis, and they fully proved its value, for even such things as an abscess near the elbow-joint, which by ordinary means was diagnosed as a case of tuberculosis, and a coin lodged in the intestines, were detected. Close by Mr. Herbert Jackson repeated his Chemical Society experiments, showing how phosphorescent materials make α rays visible.

Illustrative of another branch of photography was a series of pictures exhibited by Professor Worthington, F.R.S., and Mr. R. S. Cole representing the splash of a drop when falling in water. These showed the drop from the moment that it falls on the water to the formation of the ripple on the surface, about 100 exposures being entailed. Each exposure is by the electric spark, and is less than three-millionths of a second—which is an almost appalling illustration of the rapidity of chemical change as exemplified in the sensitive plate. The point of the investigation, however, was the nature of the splashes, which, roughly, is that a drop of liquid falling upon a liquid first makes a crater like one of those seen in photographs of the moon; then it widens itself out to a saucer, and from the centre shoots up a pillar of water shaped like the Eddystone lighthouse; that subsides, and we see the first ring of the ripple. If a solid sphere with rough surface is dropped into the water the crater becomes a bubble like a night-light glass, and the pillar of water is longer and tapers straight to a point, and has not at the point the nodule seen with the water-drop. Mr. W. Friese Greene exhibited his photographic printing-machines, capable of printing 2,000 to 3,000 bromide-positives an hour, and 12,000 an hour. The first is an arrangement of printing-frame, developing, fixing, and washing dishes. The paper passes through from a roll. In the frame it is stopped for a moment under the negative while an electric light flashes upon it; it passes on to a dish of amidol developer, and by the time it gets there another exposure is made, and so they go on hour by hour. The other machine prints on both sides of the paper. In it the negatives are on film and are fixed round two cylinders; between these cylinders the paper passes, and while that is done the cylinders are moved and the exposures are made. The developing, &c., is as in the other machine. Mr. Greene intends his invention to supersede half-toning printing for the finest work. Captain Abney showed in the next bay how to take monochromatic images, and beside him was Mr. F. E. Ives, with his stereoscopic photo-chromoscope, which is better than ever. So far, this is the nicest way of getting photographs to reproduce the colours of Nature. With a triple-lensed camera, and as many colour-screens in front of the lenses, Mr. Ives takes three photographs on one plate. Positives of these are printed on slips of glass, which are then put in a stereoscope

behind coloured glasses, and when seen through the two lenses the picture stands out in the natural colours of the objects. One of the pictures was a boxful of crystallised jujubes of all colours, which made one's teeth water. At 9.30 there was a lantern demonstration by Dr. Berget of Lippmann's colour-photographs. A large number of the exhibits were

PURELY SCIENTIFIC

in interest. For example, Mr. Joseph Gould showed steel tuning-bars—*viz.*, bars of steel which, when rubbed with a piece of indiarubber, emitted a note; and sand strewn on the surface gathered into a waved band indicating vibration-axes, while towards each end was a vortex exhibiting such powerful molecular movement that a steel cylinder about 2 lbs. in weight placed upon it whirled round like a living thing. Professor Hartley had a series of spectrum photographs showing the occurrence of gallium in the "blow" of Bessemer steel. This has led to the isolation of this rare element from the metal, as well as the iron ore of Middlesborough. Professor Roberts-Austen had a small but intensely-interest-



CO₂ CAPSULE ON TOP OF SODA-WATER BOTTLE WITH ONE FIXED IN.

ing experiment. On heating an aluminium wire with an electric current of 30 amperes, it is raised to 400° C. above the melting-point of the metal, but remains intact because a coating of the oxide—literally porcelain—is formed on the surface, and that there is fluid aluminium inside is proved by the fact that a magnet attracts the wire. A series of slices of gold nuggets, exhibited by Professor Liversidge, proved that native gold is crystalline, therefore that it does not form by strata, as has been supposed, but by actual crystallisation from an original solution. In connection with the explosion of gas-cylinders, Professors Urwin and Boys exhibited a number of the cylinders with which they had experimented on behalf of the Home Office. Their experiments conclusively prove the superiority of soft annealed steel, and that mixtures of gases are extremely dangerous—in fact, Professor Boys went so far as to say that it is criminal to put mixed gases in cylinders. In the same room was an instrument, designed by Mr. Horace Darwin, for observing and recording slow tilts and pulsations of the earth's surface; this is called the bifilar pendulum. The essential parts are two mirrors hung with extreme delicacy. Upon one a beam of light falls, and this is reflected upon another, from which it is again reflected as a slight of light which falls upon a rod-index. The delicacy of the arrangement may be judged from the fact that simply placing the

finger-tips on the rigid marble table upon which the instrument stood sufficed to make the light-slit move along the index an inch or two.

There were several biological exhibits, and the Director of the Royal Gardens, Kew, showed a selection from the collection of dried plants made by Mr. and Mrs. St. George R. Littledale on their arduous journey across Tibet in 1895. These plants were collected in the Gooring valley, between Lhasa and Tengri Noor, which is at an altitude of about 16,500 feet. The plants, which were among the few things saved, are interesting as a sample of the vegetation at this great altitude and in a region practically unknown before Mr. Littledale's party visited it. A fern and a grass were amongst them.

The only exhibit of first-class commercial importance from our point of view was an invention which may cause

A REVOLUTION IN THE SODA-WATER TRADE.

This was a little sheet-steel capsule, olive-shaped, and about a drachm in capacity, which is filled with carbonic-acid gas at a pressure of sixty atmospheres. One of these capsules is placed in a specially-designed stopper fitted to an ordinary soda-water bottle, and when the stopper is closed a pin-point goes through one end of the capsule and allows the gas to escape. This is quickly dissolved by the water, and after a shake the bottle may be emptied of its contents—a really good and sparkling beverage, the quality of which, of course, improves the longer it is kept in the bottle. So it is possible to carry a dozen of soda water in the waistcoat-pocket, and Messrs. Read, Campbell & Co. (Limited), Broad Street Avenue, E.C., who showed the "Aërotors," put them up in dozen boxes like so many gelatine capsules.

New Companies and Company News.

PIONEER PETROLEUM SYNDICATE (LIMITED).—Capital 50,000*l.*, in 1*l.* shares. Objects: To acquire, develop, turn to account, and deal with any lands, oil-wells, refineries, mines, machinery, plant, &c., and to acquire, purchase, supply and deal in petroleum and its products.

KILPEST MANUFACTURING COMPANY (LIMITED).—Capital 2,000*l.*, in 1*l.* shares. Objects: To manufacture, sell, and supply a sticky and adhesive fly-paper to be called "Kilpest," and also any drugs, minerals, oils and compositions for use in getting rid of insects and vermin. Registered without articles of association.

MATTHEWS' KENTISH WHITE-LEAD COMPANY (LIMITED).—Capital 30,000*l.*, in 1*l.* shares. Objects: To carry on the business of smelters, manufacturers of and dealers in lead, de-silverisers, chemists, drysalts, oil and colour men, and importers and manufacturers of and dealers in chemical, industrial, and other preparations, and articles, compounds, cements, oils, paints, pigments, varnishes, &c.

E. C. CASSELS (LIMITED).—Capital 2,000*l.*, in 1*l.* shares. Objects: To acquire, take over as a going concern, and carry on the business of soap-makers, general refiners, perfumers and toilet-requisite makers, carried on at 68 and 68a Lincoln's Inn Fields, London, W.C., under the trade name of "E. C. Cassels," and to enter into an agreement with Chas. B. Fisk and Frederick Reeves, of that address.

BAILEY PROCESS COMPANY (LIMITED).—Capital 20,000*l.*, in 1*l.* shares. Objects: To acquire, develop and turn to account any patents, patent rights, &c., and to manufacture, sell and deal in white lead, oils, colours, paints, varnishes, &c. Among the signatories to the Memorandum of Association appears the name of J. W. Douglas, chemist, of 9 Arundel Street, Strand, London, W.C., who subscribes for one share.

J. L. PULVERMACHER & Co. (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects: To acquire and take over the business carried on as J. L. Pulvermacher & Co., at 194 Regent Street, London, and to carry on the business of medical electricians, galvanic-battery manufacturers, and manufacturers of and dealers in anatomical, orthopædic, and surgical appliances. The signatories are all clerks. The first directors are to be

nominated by the subscribers. Qualification, 50*l.* Remuneration, as the company may decide.

A. J. KEY & Co. (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects: To carry on the business of perfumers soap-makers, scent importers and dealers, patent-medicine vendors, drysalts, druggists' sundriesmen, and manufacturers of and dealers in toilet articles. None of the subscribers are connected with the trade. Registered without articles of association.

THOMAS YOUNIE & Co. (LIMITED).—Capital 20,000*l.*, in 1*l.* shares (of which 5,000 are preference). Objects: To acquire, and take over as a going concern, the business of paint and varnish manufacturer carried on by Thomas Younie, at 71 Westgate Road, Newcastle-upon-Tyne, to enter into an agreement with the said vendor, and to carry on the business of manufacturers of and dealers in paints, colours, varnishes, oils, japans, lacquers, white and red leads, dryers, patent terebene, soaps, chemicals, &c. Registered office, 71 Westgate Road, Newcastle-upon-Tyne.

KNOEFERL-BONN DENTAL AND ELECTRICAL MANUFACTURING COMPANY (LIMITED).—Capital 10,000*l.*, in 1*l.* shares. Objects: To acquire the business of a manufacturer of dental appliances and mechanical engineer carried on by Francis Knoeferl at 100 Bolsover Street, W., and also the business of an electrical engineer carried on by Jacob Bonn, at 1 Holborn Place, to enter into an agreement for such acquisition and to carry on the business of manufacturers of and dealers in optical, mathematical, scientific and dental appliances, instruments, materials, &c. Manufacturers machinists, electrical engineers, fitters, millwrights, &c. Registered office, 9 Broad Street, Avenue, London, E.C.

DANIEL MELIA & Co. (LIMITED).—Capital 60,000*l.*, in 1*l.* shares. Objects: To acquire and take over as a going concern the business of a tea-dealer, provision-merchant, and general-store trader carried on by Daniel Melia, to enter into an agreement with him for the purpose, and to carry on the business of tea-dealers, provision-merchants, grocers, buttermen, dairymen, butchers, wine and spirit merchants, drapers, stationers, ironmongers, booksellers, printers, publishers, wholesale and retail chemists and druggists, furniture-dealers, jewellers, &c. The first directors (to number not fewer than three nor more than ten) are Daniel Melia, E. Melia, D. Melia, W. H. Mootz, C. McKeon, E. Hunter, and G. W. Wilson. Qualification, 25 shares. Daniel Melia is to act as the managing director, with a salary of 500*l.* per annum. Registered office, 9 and 10 Jewry Street, Aldgate, E.

THE SCOTTISH CYANIDE COMPANY.—Registered in Scotland. Capital 200,000*l.*, in 10*l.* shares. The objects of this company are to acquire the patent rights—British, foreign, and colonial—which have been granted or applied for by James Burgess Readman, D.Sc., analytical and consulting chemist, 4 Lindsay Place, Edinburgh, in respect of an invention for improvements in obtaining cyanides and ferrocyanides, and the benefit of all further inventions or improvements by the patentee in connection with the manufacture of cyanides or ferrocyanides, and also the movable plant and machinery used in making experiments in connection with the invention and materials now belonging to the inventor, and for that purpose to adopt and carry into effect an agreement entered into with him, and to carry on in the United Kingdom or elsewhere the business of manufacturers of cyanides and ferrocyanides, and of merchants and dealers in the same, &c. The first subscribers are:—J. B. Readman, analytical chemist, 4 Lindsay Place, Edinburgh; G. H. Gemmel, analytical chemist, 4 Lindsay Place, Edinburgh; Chas. M. King, merchant, 115 Wellington Street, Glasgow; Thos. Aitken, shipowner, 5 Grosvenor Crescent, Edinburgh; George Readman, advocate, 10 Darnaway Street, Edinburgh; W. A. Robertson, 43 West Nile Street, Glasgow; Wm. Sanderson, distiller, Talbot House, Leith; Wm. Blair, LL.B., 28 Charlotte Square, Edinburgh. Registered office, 20 George Street, Edinburgh.

THE Pharmaceutische Handelsvereëning at Amsterdam has paid to its shareholders a dividend of 8½ per cent, in respect to its business operations in 1895.

THE HÖCHST Dyeworks (Meister, Lucius and Brüning) have again declared a dividend of 28 per cent. on their ordinary shares. This is the highest dividend paid by any chemical firm in Germany. The net profit of the concern in 1895 was over 500,000%. The dividend for 1894 was also 28 per cent.

CASH SUPPLY STORES (LIMITED) (HALIFAX).—The eighth ordinary general meeting of the Cash Supply Stores (Limited) was held on May 4 at the offices of Mr. Thomas England, Crossley Street, Halifax. It was reported that the sales showed an increase of 4,000% over the previous year. A dividend of 5 per cent. was declared, and a balance of about 400% carried forward.

BOOTS (LIMITED) are offering a further issue of shares. The authorised capital of the company is 180,000%, divided into 100,000 6-per-cent preference shares and 80,000 ordinary shares. Of these, 55,000 preference and 45,000 ordinary are already issued (of the latter 15,000 are deferred). The present issue is 20,000 preference shares at 28s. each, and 5,000 ordinary at 38s. each.

GERMAN CHEMICAL DIVIDENDS.—The union of chemical factories, "Silesia," at Breslau, have made a net profit in 1895 of 774,362m. The articles of association of the company have been widened, so as to permit them to engage in trading and manufacturing operations of all kinds. The chemical-works, "Elektron," have increased their share capital from 3,000,000m. to 4,000,000m., in order to provide for the expenses connected with the working of the electrolytic-potash factory, which they are establishing in conjunction with the Westeregeln Company. The gross profit of the medicinal springs at Obs-Selters in 1895 has been 75,854.15m.; only 28,728m., however, will be divided among the shareholders, who will receive out of this a dividend of 12 per cent. The net profit of the dye-works, formerly A. Leonhardt & Co., at Mulheim-on-Maine, has been 187,637m., of which 150,000m. will be used to provide a 10-per-cent. dividend for shareholders. The directors of the company state that trading last year has been less satisfactory than in 1894, the chief reason being the general decline in prices of the prepared articles, together with an increase in those of the raw materials. The total amount of sales, however, has been larger than in the preceding year. The profit of the chemical-works at Buckau, in Magdeburg, has been 253,430m., against 325,021m. in the year before. The dividend is to be the same—viz., 8 per cent.—and, in addition to an amount of 155,739m. spent on new buildings, the factory intends to erect new works for the electrolytic manufacture of bleaching-powder and caustic alkalies. The shareholders in the chemical-works at Griesheim receive 16 per cent. dividend for 1895, the same as in the preceding year. The gross profit of the factory last year was 160,104m., and it is proposed to amalgamate the factory with the chemical-works "Mainthal."

THE BORAX COMPANY (LIMITED).—The ordinary general meeting of the shareholders of this company was held at Winchester House on May 1, the Hon. H. A. Lawrence in the chair. The accounts, made up to December 31, showed that the net profits of the year's working, including the balance brought forward from the last account, amounted to 22,296*l.* 11*s.* 1*d.* The Chairman, in moving the adoption of the report and accounts, observed that although the profits showed a sensible increase, the low prices which, owing to competition, they had been compelled to take for all their products, had not increased their trade to the extent they had hoped. Their increase was mainly due to the sale of concentrates, the product of the treatment of low-grade ores, which had fully justified their expenditure of a few years ago in special machinery for the purpose. For the improved administration at Maisons-Lafitte Works, which were chiefly responsible for the increased profits, they had to thank their committee in Paris and their manager at the mine. The cost of production had been the lowest in the history of the company, and they believed it was capable of still further reduction if they could obtain an increased trade. The directors had organised a scheme for making their articles better known, and for bringing them within the reach of a larger circle, and there was every prospect within a reasonable time of attaining that result. Competition was now very serious. They had to deal not only with the product of

South America, but also with that of California, which had recently come over in increased quantities, and there did not seem to be any probability of a decrease in the future. The company must, therefore, look to increased sales and to making their products better known, to contend against this. He repeated arguments he had used last year in favour of a reconstruction of the capital of the company. It was clear that the dead weight of capital on both classes of shares, as well as the debenture mortgages, was more than the company could bear, and it would be to the interest of the shareholders to get down the capital to something like the market-value of the shares, and towards this result he would direct his energies during the next few months. The adoption of the report and accounts was seconded by Sir W. Guyer Hunter, K.C.M.G., and unanimously agreed to. The retiring members of the board (Mr. O. C. Waterfield and Mr. A. van Branteghem) and the auditors (Messrs. Jackson, Pixley & Co.) were re-elected, and the proceedings terminated.

Business Changes.

Notices of changes in the retail trade, and opening of new businesses, are inserted in this section, free of charge, if properly authenticated.

MESSRS. JOHN BENNET LAWES & CO. (LIMITED). have removed from 29 Mincing Lane, to 21 Mincing Lane, E.C.

MESSRS. CHARLES YARBOW & CO. have commenced business as drug and general merchants at 36 Basinghall Street, E.C.

MESSRS. D. GRAHAM & CO., Penang, have taken over the Penang branch of Messrs. Maynard & Co. (Limited).

MR. F. W. DOWN, chemist and druggist, Northam, has disposed of his business, and is about to take up his residence in Plymouth.

MR. JOHN T. BUTTERWORTH has sold his business at 175 Oxford Road, Burnley, to his brother, Mr. Henry L. Butterworth. The first-named has taken premises at 22 Bankhouse Street, Burnley, where he has opened a "cheap cash drug-store."

The business carried on by Mr. T. Spring Smyth at 117 Westbourne Grove has been transferred to Mr. William Andrew, of 14A Garway Road, W.

The business of the Wandsworth Chemical Company has been amalgamated with that of Messrs. Wortley, Cane & Co., of Clifford Street Works, Oxford Road, Manchester, which has been converted into a limited company. The united business will be carried on under the style of Wortley, Cane & Co. (Limited), both the Manchester and the Wandsworth works being retained.

FOR GIVING A MAN LAUDANUM instead of tincture of rhubarb a Connecticut druggist has had to pay \$125.50. The man wanted \$1,000.

POISONING WITH FOWLER'S SOLUTION.—A family residing at a tenement house on Rua do Ypiranga, Rio de Janeiro, had been in the habit of taking Fowler's solution of arsenic as a preventive for fever. Recently the family, after taking a dose, were seized by symptoms of poisoning, and the mother died within a few hours. The head of the family then took the bottle to the chemists, and asked Senhor Martins, whose partner, Bastos, had dispensed the mixture, whether there was not something wrong. The chemist, however, ridiculed the idea, and unhesitatingly swallowed a large spoonful of the liquid. An order was subsequently issued for the arrest of Bastos, who, however, could not be found. The bottle which contained the liquid has also disappeared. Martins' theory is that the woman took an overdose; while fasting, to which he attributes the fatal result. It is stated, however, that even he, though not at first affected by the dose which he had taken, showed, later in the day, alarming symptoms and resorted to antidotes, which were also applied to the child and its father.

In Silk and Colours.

THE metropolitan members of the Society of Chemical Industry assembled at Burlington House on Monday evening to hear two papers, which were somewhat out of the common run, the first being on "Artificial Silk"; and the fact that the *Times* devoted about a column to this subject on Saturday last perhaps accounted for part of the large attendance. Dr. Radolph Messel presided over the section for the first time, and the members gave proper acknowledgment of the fact. Mr. Bevan read the paper on

ARTIFICIAL SILK,

confining himself to the chemical aspects of the matter. We may interpolate that the invention is not quite new, as it was shown in operation in the Machinery Hall of the Paris Exhibition in 1889 (see *C. & D.*, xxvi, 570), and created a great deal of interest then. The principle of the process is to take a cellulose material such as cotton or wood pulp, and convert it into nitro-cellulose in the ordinary way. After purification it is made into a thick colloid, and this solution is virtually squirted out of a needle-point nozzle, whereby filaments are formed. About a dozen of these are spun into a thread, and wound on a bobbin. These threads are next passed through a denitrifying-agent (ammonium-sulphide solution), washed, dried, and finally ironed, to give lustre. The fibre is a pure cellulose, Mr. Bevan explained, only 0.2 of nitrogen remaining in it, and he preferred to call it lustro-cellulose. Many samples of the fibre in brilliant colours, and ribbons, curtain, and dress-material, &c., made with it were exhibited, and the beauty of these, together with the similarity to silk, seemed to astonish the audience. Mr. Bevan explained that the fibre dyes readily, and that in tensile strength it is 70 to 80 per cent. that of silk. The fibre is made under patents granted to Count Hilaire de Chardonnet, and although it was shown at the Paris Exhibition in 1889, it was not till 1893 that he, according to the *Times*, "first established the fact that it might be made into a commercial success." There is a factory at Besançon, photographs of which were exhibited; and it is proposed to start a factory, which will cost 30,000*l.*, near Manchester.

A brief discussion of a conversational and unimportant character followed Mr. Bevan's communication, after which Mr. E. J. Wall, F.C.S., the Pimlico chemist and druggist, who has become within recent years an authority on photographic matters, read a paper on

THE REPRODUCTION OF COLOUR BY PHOTOGRAPHY.

Mr. Wall, dividing his subject into three sections, explained that the first or direct method was comparatively ancient—that is to say, Becquerel and others, about seventy years ago, obtained on silver-chloride plates reproductions of the colours of Nature, but they could not fix them. The second method is by interference, and is typified by Lippmann's process (*C. & D.*, April 25, page 580). Mr. Wall very clearly described the optical conditions necessary for obtaining Lippmann colour-photographs, and explained that when looked at straight they are the usual brown or black colour, but at a certain angle the natural colours of the object are seen. The process is never likely to be a commercial success. The third method of colour-photography is the indirect one, and consists in taking three photographs of the object, through screens of the three primary colours, upon plates which are rendered particularly sensitive to these colours and those directly associated with them. Reproductions of these can be made (1) by taking three chromo-gelatine prints—red, yellow, and blue—and superposing them; (2) by collotype (*i.e.*, chromo-gelatine on plate glass) or lithographic reproductions on asphalted stone, one reproduction for each of the three colours; and (3) by half-tone engravings on zinc or copper, and printing, as in the case of (2), with pure yellow, red, and blue colours. Incidentally he referred to the work by Ives and Joly, and strongly advocated greater attention to the third method by English workers, as they have fallen behind Americans and Germans; and he pointed out that in the United States travellers carry with them colour-repro-

ductions of cloths, carpets, &c., instead of the bulky samples. A large number of beautiful examples of colour-printing were exhibited.

In the discussion Mr. Crome, of the Eastman Company, asked if Lippmann's photographs could be printed, and if it was true that only about one in sixteen of the prints made by the third process was good. Mr. Geddes, replying to the latter query, said that by the collotype process they could not get that equal transference of the individual inks which gave a perfect print, but they have succeeded much better with the block process. Mr. Wall corroborated this, stating that one good print in twenty was near the truth, and said that a great deal depended upon the inks, which must be made with pure colours—the red was a madder, the yellow a zinc-yellow, and the blue a secret colour. Replying to Mr. MacEwan, he said that he had exposed prints to London sunlight for eight months and they did not fade. Lippmann said his photographs could not be reproduced, but he thought they could, and was trying to get them.

The Mineral-water Trade.

THE annual meeting of the National Alliance of Mineral-water Associations was held at the Covent Garden Hotel on April 30. Mr. Richard Johnson, J.P. (Wigan), presided, and there were delegates from Manchester, Yorkshire, Newcastle-on-Tyne, North Wales, North Staffordshire, Bolton, Wigan, Nottingham, and Birmingham, besides Mr. E. S. Crick (President) and Mr. Walter Davenport (Secretary) of the London Association. The Secretary of the Alliance (Mr. William Tooke, of Leeds) reported that the Alliance at present embraces societies in thirty cities and towns, including a membership of about 3,000 mineral-water manufacturers; and negotiations were in progress for including Glasgow, Belfast, Aberdeen, and Torquay in the National Alliance. The principal subjects for discussion at this meeting were the proposed amendment to the Merchandise Marks Act of 1887, and the amendments to the Factory and Workshops Act of the present year. The Law Committee were empowered to do all that was necessary to get a clause introduced into the Merchandise Marks Act which would make it penal for any person other than the owner to use any mineral water or beer bottle for any purpose other than what was the original intention; to make it penal for any person to fill a bottle bearing another man's name or identifying marks; and, further, to prevent bottle dealers trafficking in mineral-water and beer bottles. The Secretary said he had been in communication with the Home Secretary with regard to the restrictions imposed upon the mineral-water and other industries in the matter of employing young persons under 18 years of age after the regulation hours. It was generally felt that in the busy season employers should be allowed to work their young people a few hours' overtime, because very often the factories were not sufficiently large to accommodate necessary machinery and hands to meet the demand in the summer, whilst they were more than adequate in the winter. The Home Secretary had promised a consideration of the matter, and, if necessary, to receive a deputation on the subject. The question of Government competition with the mineral-water trade was also discussed, the meeting being unanimously of opinion that it was unfair for the military authorities to manufacture the mineral water for their canteens in competition with tradesmen, who have to pay heavy rates to keep up the national armaments. The Secretary said he had sent circulars to every member of the House of Commons drawing attention to this anomaly, and the replies up to the present had been satisfactory. Several grants were made to affiliated societies to enable them to assert their legal rights to their own property in bottles, boxes, syphons, &c., and generally to protect their trade interests. The retiring officers were re-elected.

NOT THE SAME SCOTT—"They say Scott did not make as great a success as he should of his 'Ivanhoe.'" "Perhaps he didn't advertise it as extensively as he does his emulsion."—*Truth* (U.S.A.).

The Proprietary Articles Trade Association.

EDINBURGH.

A MEETING of chemists and druggists of Edinburgh and district was held in the Pharmaceutical Society's House, 36 York Place, on the morning of May 1. A deputation of the Proprietary Articles Trade Association attended, and a large number of chemists and druggists were present. The deputation consisted of Mr. G. R. Barclay (London), Mr. Glyn-Jones (Secretary of the Association), Mr. J. Norris (Condal Water), Mr. J. Cameron (Liebig's Extract Company), Mr. J. R. Robertson (Bovril, Limited), and Mr. C. H. Corbett (Stephen Smith & Co.).

Mr. Peter Boa (Chairman of the Edinburgh and District Chemists' Association) said that, while the officers of their Association had made arrangements for this meeting, they felt that this was a question on which their Association could not act, because one of their regulations was that, as a body, they would not have anything to do with prices. They would be glad, however, to hear the deputation. He proposed that Mr. Barclay should take the chair.

Mr. Barclay, in the course of a few remarks, said if he chanced to ask anyone in business touch with the great bulk of their trade in this country whether chemists were advancing financially in the same way as they were educationally he felt certain the answer would be that they were not. The reason was the insane cutting of prices that was going on. He did not think anyone would dispute the use of the adjective "insane" in this sense, because no one benefited except the public. Even the trader who began the cutting did not benefit long. It had been urged in some quarters, and he had seen it in the trade papers, that it was ridiculous for them to go about the country holding these trade meetings, and that if chemists did not see it to be to their advantage and interest to support this Association, they should be left alone. He was sure that was a mistake. Such a plan had been successful before, and if it could not be done by printer's ink, the only other way was to go round explaining the objects of the Association. There was an enemy at their gates in the person of the drug-stores, which were spread all over the country, and, unless they combined together, shoulder to shoulder, against them, they could not do anything. Here was an organisation already formed. They asked them to enrol themselves under its banner, and if they did not achieve success they would not have themselves to blame.

Mr. C. F. Henry read apologies from a number of chemists, who expressed their entire approval of the objects of the Association.

Mr. Glyn-Jones, having thanked the Edinburgh District Chemists' Trade Association and their Secretary for the help they had given him in organising that meeting, explained the origin, composition, and constitution of the Proprietary Articles Trade Association, pointing out especially that it had its origin among retailers and not among manufacturers. He then, at considerable length, explained its objects, chief of which was the prevention of cutting, and what they knew to be a result of it—substitution. That was an object which all pharmacists were in sympathy with, but they wanted to know what prospect there was of success. Their Association was based on the fact that no manufacturer could expect anyone to distribute his articles for nothing. A man could not open a shop for the fun of it, and sell proprietary articles at 5 per cent. or less profit. That was the crux of the whole business. The manufacturers thought, when the drug-stores were started, that it would be a very good thing for them; but they were finding that they were suffering along with the rest, because these men and stores made a business on the reputation of proprietary articles, and, as soon as they had done that, they started to manufacture on their own account, and the proprietary article was substituted by an article made in their own back kitchen. He urged the necessity for chemists combining and forcing manufacturers to recognise the legitimate chemist in preference to the stores. In his explanation of how they were going to prevent cutting, he said they had got the opinion of counsel, and he

was glad to tell them they had got all they asked, and more too. The method they proposed was that they should combine to fix the price of their goods, then go to the wholesale houses and get them to give an undertaking first of all to maintain certain wholesale prices, and next to withhold supplies from anyone whom they found supplying any article below the fixed price. The wholesale trade and the manufacturers would thus be pledged not to supply goods unless to those who traded on fair lines. If that could be done—and he felt perfectly sure it could—they would have a good leverage. He warned them that the stores would not stop at cutting proprietary articles, but would do the same with prescriptions. Therefore he hoped they would see it to be to their interest to support this movement.

Mr. David McLaren (Edinburgh) moved—"That this meeting of chemists residing in Edinburgh and district pledges itself to support the Proprietary Articles Trade Association, and urges upon all manufacturers of proprietary articles the importance of co-operating in the movement." He thought the movement was a step in the right direction.

Mr. McDougall (Leith) seconded, and Mr. Norris spoke in support of the resolution.

Mr. Morison (Edinburgh) asked how they proposed to deal with co-operative stores.

Mr. C. F. Henry said he considered the present agreements were not worth signing, and asked what profit the Association proposed they should have; whether they would guarantee a profit of 20 or 25 per cent.; how they were to trace an article sold, say, in Manchester, by a store; and whether there was any idea of ascertaining the price of an article and maintaining it as the price to be charged to the public by all parties.

Mr. McGlashan (Edinburgh) asked what action the Association would take in the case of a man who, having had supplies stopped for cutting, increased his business greatly by advertising that he had been boycotted by his neighbours for selling at a fair profit.

Mr. McKenzie asked if it was intended to work the Association alongside of the Grocers' Federation.

Mr. Glyn-Jones, in reply, said there was a serious difficulty with regard to co-operative stores; but the Association held that to sell an article at a shilling and afterwards give a dividend or bonus was cutting, and they would ask manufacturers to understand that upon protected articles the stores would not be able to give a dividend, or that in the first instance such a price would be charged for the article that when the dividend was taken off it would bring it down to the same value. The manufacturers had to decide between the legitimate trade and the cutters. If the fox-terriers were muzzled the colliers would have to be muzzled too. With regard to profit, the Association were not responsible for the amount guaranteed in the past by firms connected with the Association. But there would have to be a division of articles. They had articles of a medicinal character—goods upon which they should get a larger profit than on goods which had a much more considerable demand. But he might say that, in the opinion of the Association, a fair profit upon proprietary medicines should be not less than 20 and, if possible, 25 per cent. With regard to tracing cutters he said that was easier than might be supposed, and he suggested the numbering of each article, as was done with Elliman's embrocation. As to the face price of an article, speaking as a chemist, and not as the Secretary of the Association, he held that the price should be absolutely the face value. As to the next question, he said he did not think the public was unreasonable, and he did not think it would do any trader good to advertise that in such circumstances the manufacturer had refused supply. They had already had a conference with the committee of the Grocers' Federation, who expressed full sympathy with them and stated that they would report to their annual conference at Cardiff.

The motion was adopted unanimously.

Mr. Peter Boa moved—"That a trade committee of Edinburgh and district be appointed to act with the Proprietary Articles Trade Association."

Mr. C. F. Henry seconded, and said it was not for want of sympathy that the committee of the Chemists' Trade Association could not see their way to act. They interested themselves in trade matters, but they had not as yet touched the question of trade prices.

Mr. C. H. Corbett supported the resolution, and urged all those present to join the Association.

The resolution was agreed to.

Mr. David McLaren said he was in hearty sympathy with the movement taken up by this Association, but there was just a danger of overstepping the bounds of discretion with regard to co-operative stores. He gave an instance where a grocer who sold at a fair price offered $2\frac{1}{2}$ per cent. discount for cash accounts of 5s. and upwards, and one of the anti-cutting firms stopped the supplies to him, while it continued to supply a co-operative store giving a 15 or 20 per cent. dividend. He was of opinion that that man should have been allowed supplies on the same terms as the rest.

Mr. Glyn-Jones said a few words in support of the candidature of Mr. Park (Plymouth) and Mr. Campkin (Cambridge) for the Pharmaceutical Council election, and, after a vote of thanks to the Chairman, the meeting terminated.

A number of those present gave in their names as members before leaving.

LEEDS.

There was a good attendance at a meeting of chemists and druggists of Leeds and district held in the Law Library, Albion Place, Leeds, on Tuesday evening last. Mr. George Ward (Leeds) presided, and there were present on behalf of the Association Mr. Frank Hoy (Bovril, Limited), Mr. Simpson (Liebig's Extract of Meat Company), Mr. H. J. Hall (Hall's Coca Wine), Mr. J. J. Norris (Condal Water Company), and Mr. H. S. Glyn-Jones (Secretary).

In the course of his opening remarks, the Chairman said their object in meeting was to hear what the representatives of the Proprietary Articles Trade Association were prepared to lay before them, so as to effect a very desirable change in the sale of proprietary articles generally. He hardly thought there would be amongst chemists two opinions as to the desirability of some modification of the present system. At the present time proprietary articles were scarcely worth handling from a commercial point of view. Competition during the last twenty-five years had so reduced the retail prices at which those articles were sold as to make the business unremunerative. If they were compelled to adopt similar rates in other parts of their business it would be suicidal. A similar state of things obtained to some extent in the wholesale trade, and it was high time some steps were taken to remedy the evil. The Association was not a body of retail chemists, but it was composed mainly of manufacturers who were beginning to feel that it was imperative that they should organise some method of preventing this suicidal cutting.

Mr. Glyn-Jones explained the objects of the Association. He said the Chairman was not quite accurate in stating that the movement was initiated by the manufacturers. It really came from the retailers, who thought they saw a way of placing their trade on a sounder business footing. Some manufacturers were prepared to co-operate with them. Their principal object was to counteract the evil of cutting. They considered that a profit of from 20 to 25 per cent. on the sale of patent medicines should be guaranteed. (Hear, hear.) The man who cut was not a legitimate member of the trade. The achievement of their object was quite possible, and even probable, in the interests of the proprietors themselves, who had the right to withhold the supplies of their goods except those who would deal fairly with them. They had also another string to their bow. If it was possible for a manufacturer to do it singly it was just as possible to do it in combination, so that the manufacturers could stand by each other. For some time the movement had been delayed because they found it necessary to submit the whole of their plans for an eminent legal opinion. Only a few days ago they received the opinion, and, so far as they were concerned, it was extremely satisfactory. They suggested that the manufacturers should state the minimum price at which their goods should be sold, with the intimation that any retailer who cut one of the articles below that price should not be able to obtain any more supplies. In the case of men who were cutting it would be necessary first of all to try and induce them to sell goods at the proper price. He wanted to insure one price—a face value for these proprietary goods. (Applause.) Eighty per cent. of the trade was seriously affected by the question, and they mig't

depend upon it that unless they combined and did something to meet those evils that threatened their business they would have to give it up.

Mr. Reynolds (Messrs. Reynolds & Branson, Leeds) proposed—

That this meeting of registered chemists, residing in Leeds and neighbourhood, having heard the objects and proposals of the Proprietary Articles Trade Association, considers them worthy of support by chemists generally, and would urge upon all manufacturers and wholesale traders the importance of assisting the movement.

The resolution was seconded by Mr. Webb (of Ilkley), and supported by Mr. Hirst, representing the Council of the Association, and Mr. Corbett (Coca-wine).

Mr. Maude (of Pontefract) opened a discussion, which was taken part in by Mr. Wilson (of Harrogate), Mr. Hebden (Halifax), Mr. Metcalfe (Headingley), Mr. Hardman (Leeds), Mr. Dann (Shipley), and Mr. Crossby (Leeds).

On the motion of Mr. Maude (of Pontefract), seconded by Mr. Fourness (of Leeds), the following resolution was passed:—

That this meeting requests the Council of the Leeds Chemists' Association to act for the present as the local Executive of the Council of the Proprietary Articles Trade Association.

This concluded the business.

BRADFORD.

A meeting of chemists, convened by the Council of the Bradford and District Chemists' Association, was held at the Mechanics' Institute, Bradford, on Wednesday. Mr. E. Mackay (President of the Bradford Association) occupied the chair. The deputation representing the Proprietary Articles Trade Association consisted of Mr. J. F. Garratt ("Frog in your throat"), Mr. W. Simpson (Liebig's Extract of Meat Company), Mr. Frank Hoy (Bovril, Limited), Mr. J. Norris (Condal Water), and Mr. W. S. Glyn-Jones, Secretary. There were also present Mr. Hirst, of Leeds; Mr. H. W. Seely, Mr. Pollard, Mr. Geo. Cobb, and Mr. J. H. Wilson, of the Halifax Association; Messrs. Chaplin, Green, Pollard, and Duffin, of the Wakefield Association; and Mr. Geo. Rimmington (Vice-President), Mr. R. W. Silson (Treasurer), Mr. S. Norman Pickard (Hon. Secretary), and Messrs. A. Knight, J. M. Newbould, T. Stead, F. K. Taylor, H. Dunn, and A. H. Waddington, Members of the Council of the Bradford Association, and a large number of other chemists.

The Chairman said they were all agreed that upon this subject of cutting it was high time something was done. They might disagree as to the means, but they were all convinced that the evil was a serious one and that the matter was now ripe for action. He hoped that the members of the deputation would not be surprised if the local chemists did not take them to their arms all at once, because some of them felt that they had not been so well treated during the last twenty years by the proprietors as they might have been. They were disposed to feel that these gentlemen had often stood aloof where they might have rendered material assistance to retail chemists. There was a great contrast between the time when the chemists prescribed patent-medicines as freely as possible and the present day, when there was so great a temptation to substitute anything that was possible. He thought they should adopt an intermediate course between these two. The retail chemists of to-day could not avoid selling patent-medicines, because the power of advertising was so great. Their best course was to be straight with the proprietors, and to get the best terms they could from them. His opinion, therefore, was that their best course was to join the Association for the ultimate object of the mutual benefit of all the branches of the trade.

Mr. Glyn-Jones urged that it was not only in the interests of the three sections of the trade to combine, but it was clearly possible for them to combine with such effect as to stop the cutting. That the manufacturer could control the conditions under which his articles should be sold by the retailers had been proved conclusively in the case of Eilman's embrocation. Certainly there were some manufacturers who said that they could do without the retail

chemists, and did not care a straw what they did, but it did not need more than the slightest examination to show that this position could not be maintained. The position was in reality in the hands of the retailers, and all that they asked was that the proprietors should advertise their goods at a certain price, and insist on their being sold at that price. He described the process by which the three branches in combination could deal with any emergency that might arise.

Mr. R. W. Silson, of Bradford, said in turning over the question in his mind he had felt that there was this consolation, that whatever happened in the future it could not possibly produce a worse state of things. He moved a resolution pledging the chemists of the district to support that organisation. The cost of doing so was infinitesimal, and the prospect of success was good.

Mr. Wilson, of Harrogate, seconded the resolution, and said it appeared to him that they had a good leader in Mr. Glyn-Jones, and it would be a standing disgrace if the chemists did not give him a good run for his money. He believed that the stores and the grocers and the wholesalers were all thoroughly sick of the cutting, and were themselves desiring a change. An acquaintance in the grocery trade had told him that the grocers were watching the development of the movement against cutting with great interest and hope.

Mr. Hirst and Mr. Garratt supported the resolution.

The Chairman then invited questions.

Mr. Waddington asked whether any definite amount of profit was to be guaranteed. Combination was their only hope. The chemist who had qualified himself must be allowed to carry on his business as a scientific one, and not as a mere distributing agency, and there were often good reasons for substitution in some cases. Still the proprietors would deserve a large amount of consideration if they were willing to help the retailer to get a living profit.

Mr. Pollard and Mr. Chaplin (Wakefield) also spoke in favour of the proposal.

Mr. Simpson (Bradford) asked what Mr. Glyn-Jones had to say about Pears' Soap. (Laughter.) Was there any chance of getting Mr. Barratt into the organisation.

Mr. Glyn-Jones said he thought a large number of the customers had been persuaded to take some other soap in view of the want of profit on this. Answering the question as to the profit to be guaranteed, he said the manufacturers were the people who were to guarantee the profit, but the Association—thinking that it could not be expected that they could get back to the old rates—had laid it down as a principle that there should be a profit of 20 to 25 per cent. One point which he should mention was that there was no intention to bind men not to substitute.

The resolution was carried unanimously.

Alderman H. Dunn then moved a resolution that the local chemists' executive should be empowered to act with the Proprietary Articles Association for the purpose of carrying out the foregoing resolution. Mr. Herbert Rogerson seconded, and Mr. Glyn-Jones, in supporting the resolution, said the meeting was the largest one yet held out of London.

The proceedings terminated with a vote of thanks to the Chairman.

ORPHOL is the name of a new remedy—an antiseptic compound of beta-naphthol and bismuth. In spite of its name a Cockney did not discover it.

AT THE HOSPITAL CONSULTING-ROOM.—Consulting Physician (to out-patient): "Been here before, my man?" Out-patient: "No, sir." Consulting Physician: "But I know your face perfectly." Out-patient: "Yessir; I'm a waiter at the Empire." (Unholy delight of medical students)

A BIG FRAUD.—An Armenian is at present on trial for \$30,000 damages in Philadelphia for taking in wholesale druggists, amongst them McKesson & Robbins, by selling them counterfeit Munyon homeopathic remedies. He had imitated the get-up of the goods admirably, but the medicines were merely sugar pellets without any sign of medication. The man bought pellets by the barrel, and got money for them when packed which must have reached a tidy sum. McKesson & Robbins paid him \$5,000.

Personalities.

MR. THOMAS TYRER, President, S.C.I., has been appointed a visitor of the Royal Institution.

MR. PRATT, chemist and druggist, Shipston-on-Stour, met with a painful accident on Monday last. Whilst visiting a race-meeting he received a kick from one of the horses, and sustained serious injuries to the back of the head.

DR. FREDERICK B. POWER, of New York, who is one of the leading essential-oil authorities in the United States, proposes to come to London, and here he may reside. He has severed his connection with Fritzsche Brothers.

PROFESSOR CLAUDE C. HAMILTON, M.D. Ph.G., Professor of Chemistry at and President of the Kansas City College of Pharmacy, has died there recently from tuberculosis contracted while he was examining the sputa of consumptive patients. He was only thirty.

DR. J. E. AITCHESON, C.I.E., the naturalist who was attached to the Afghan Delimitation Commission, has returned to London from North-west India and Kashmir, where for the past four years he has been continuing the further investigation of the fauna and flora of those regions.

THE employes of Lofthouse & Saltmer presented a handsome chiming hall-clock and illuminated address to Mr. J. W. Lofthouse a few days before his marriage on April 30. Mr. Lofthouse, in acknowledging the present, told his employes he was particularly delighted with this gift, and manifested his pleasure by inviting the whole of his firm's employes to spend a convivial evening with him.

THE following fifteen candidates were selected by the Council of the Royal Society last week to be recommended for election into the Society:—Sir G. S. Clarke, Dr. J. N. Collie, Dr. A. M. W. Downing, Dr. F. Elgar, Professor A. Gray, Dr. G. J. Hinde, Professor H. A. Miers, Dr. F. W. Mott, Dr. J. Murray, Professor K. Pearson, Rev. T. R. R. Stebbing, Professor C. Stewart, Mr. W. E. Wilson, Mr. H. B. Woodward, and Dr. W. P. Wynne. The chemists in this list are J. Norman Collie, Ph.D., lecturer on organic chemistry at University College, London (as assistant to Professor W. Ramsay), and W. P. Wynne, D.Sc., who holds a similar position at the Royal College of Science, South Kensington, and was formerly assistant to Dr. H. E. Armstrong at the Central Institution. Professor Henry A. Miers, M.A., F.C.S., F.G.S., is noted for his crystallographic work, and is on the British Museum staff; Dr. John Murray, F.R.S.E., is well known as the successor of the late Sir Wyville Thomson in the directorship of the *Challenger* scientific work, and is an all-round scientist, with special knowledge of oceanography. Professor C. Stewart's work as a botanist and biologist is familiar to those who frequent the Linnean Society, of which he was President, and the Royal Institution, where he lectures. Dr. F. W. Mott and Professor Karl Pearson are London University College men, the former being on the medical staff.

DR. W. H. SYMONS, who is well known in the drug-trade as a former pharmaceutical examiner and chemical adviser to Messrs. Idris & Co. (Limited), has been appointed medical officer of health for Bath. Dr. Symons is a pharmaceutical chemist, and was in business in the West end of London, but fully ten years ago he sold his pharmacy, as he wished to devote his time more fully to scientific matters. It was about that time that he became associated with Idris & Co., and the best evidence of his intelligence and scientific methods is to be found there, no aerated-water factory in the world being better equipped in respect to bacteriological and chemical supervision than is the Camden Town works. As a colleague of Dr. J. C. Thresh at Bloomsbury Square (where they supervised together the Major chemical work), it was natural that Dr. Symons should become interested in public-health matters, which Dr. Thresh was then studying, and as a result seven years ago Dr. Symons commenced medical study and in due course was registered as a medical practitioner, afterwards taking the Brussels doctorate in medicine and the Oxford diploma in public health. Of Dr. Symons's accomplishments for the position to which he has been now appointed it is unnecessary to refer in detail; but we may say that pharmacy is giving some good men to public health, and pharmacy's loss is compensated by the amelioration of unnecessary suffering in the community.

Trade Reports.

42 CANNON STREET, E.C., May 7.

THERE are general complaints of slackness in the drug and chemical trades, and the justice of this is to some extent confirmed by the Board of Trade Returns for April, published to-day. These returns, although showing an increase of 1,467,442*l.* in our imports for April, as compared with April, 1895 (April, 1896, 35,808,800*l.*; April, 1895, 34,341,358*l.*, making a total increase for the first four months of the year of about 10 per cent.), and an increase for April in the exports of British and Irish produce of 1,174,388*l.*, or over 7 per cent. (making a total increase of nearly 13 per cent. on the first four months of the year), reveal a considerable decrease in our re-exports of foreign and colonial merchandise. That department of our trade has fallen from 6,608,115*l.* in April, 1895, to 5,411,590*l.* in April, 1896. This is a decrease of quite 18 per cent., and can only be accounted for by extreme slackness in the produce-business. There are few alterations to report in the market. Refined camphor is unaltered, but its position seems very shaky. Morphia firm at last week's increase. Cocaine slow of sale. Tartaric acid again shows better prices, while citric is steady, but the advance in cream of tartar has made no progress. In quinine some business has been done at slightly easier rates. Salicin may possibly advance in price, and veratrin is dearer. Pilocarpine is lower, and sugar of milk also offers at easier rates. Phenacetin quite neglected. Mercurials unaltered. In heavy chemicals we have to report lower rates for carbolic acid in crystals. Arsenic keeps firm. Borax is still tending lower. Heavy alkalies are mostly unchanged, while sulphate of copper is steady. Glycerine slightly firmer. Permanganate of potash very scarce. The chief feature in the drug-market is a further pronounced decline in crude camphor, probably due to the uncertainty in regard to the future of the syndicate holdings. Asafoetida is said to be slightly better. Tolu balsam firmly held. Balsam copaiba tending higher. Gum acacia neglected for all kinds. Carthagenia ipecacuanha slightly easier. Menthol remains low in price. Cod-liver oil is tending easier. In essential oils we have to report lower rates for Japanese and American peppermint oil. Patchouli and sassafras oils remain very firm. Star-anise and citronella oils are easier. Orris-root rather lower. Saffron, however, has advanced. Scammony firmly held for fine resin. Senega-root offers at very low rates. Star-anise is higher, and Chinese vermilion maintains its price. Fine varieties of musk and ambergris are firmly held. Colocynth steady. In outside articles we have to report a slightly improved market in shellac. Black pepper, nutmegs, and mace are easier; ordinary Jamaica ginger and chillies higher. Cloves remain dull. Japan wax fairly steady. The Bank rate is maintained at 2 per cent., and bar-silver has slightly declined, being quoted to-day at 31*d.* per oz.

Our New York correspondent wires on Thursday afternoon:—*Curaçao aloes* is arriving pretty freely, and the price for fair quality is now again 3½*c.* per lb. *Copaiba balsam* firmly held, but prices still unchanged. *Bayberry-bark* decidedly lower, at 3½*c.* per lb. *Gum-chicle* is quoted now at 34*c.* per lb. *Coca-leaves* are held for higher prices, 22*c.* being asked for good green *Truxillo*. *Newfoundland cod-liver oil* offers at lower rates—viz., from \$1 down to 85*c.* per gallon, according to quality. *Jalap-root* shows no change. *Madrake-root* very scarce. *Opium* firmly held, with a rising tendency,

fair manufacturing, however, might still be had at \$25 per lb. *Beeswax* steady, at 30*c.* per lb. for bleached American.

Our Hamburg correspondent wires on Thursday morning:—“Our *Camphor* market is dull and tending easier. For Hamburg refined bells 3.15*m.* is still quoted, but holders Telegram. would probably accept 3.10*m.* per half-kilo. *Cod-liver oil* quiet and without business. *American* and *Japanese peppermint oils* are tending easier; lower rates would be accepted.

Our Smyrna correspondent wires on Thursday morning:—“American agents have been buying very heavily this week at a slight reduction in price. Up to the Opium Telegrams. present they have acquired 180 cases, and they still continue to place orders. Sales are chiefly in fair manufacturing-opium at the parity of 8*s.* 6*d.*, and in selected qualities at 8*s.* 9*d.* per lb., f.o.b. The market closes extremely firm.” Our Constantinople correspondent wires on Thursday afternoon as follows:—“Our opium-market is advancing quickly in consequence of heavy American buying. *Druggists'* kinds are now held at from 8*s.* 7*d.* to 8*s.* 9*d.*, *Soft-shipping* at from 10*s.* 6*d.* to 11*s.* per lb., f.o.b. A further advance is expected.”

The German Patent Office has decided in favour of the firm of J. D. Riedel, of Berlin, who claimed the removal of the phenacetin trade-mark entered upon the official German list at the request of the Farbenfabriken F. Bayer & Co., of Elberfeld. In the memorandum accompanying the decision, the German Imperial Registrar points out that para-acetphenetidin was first brought into commerce by Bayer in 1887 as acetphenetidin and quininphenid, but that in October, 1887, the name was changed to phenacetin. In 1888, however, J. D. Riedel and other firms commenced the preparation of phenacetin, and sold it under that name only, without any objection being raised on the part of Bayer & Co. It is true that at that time words could not be entered as trade-marks in Germany, but as in November, 1887, the firm of Bayer had already caused the label, including the name phenacetin, to be entered upon the register, they ought to have warned against the piracy of the word in the public Press. Far from doing so, however, Messrs. Bayer, in June 1888, caused a new label to be entered in which the word “phenacetin” was replaced by “Phenacetin-Bayer,” and since then they have advertised their article under the last-named description. The Hoechst Dyeworks in December, 1889, registered a label “Phenacetin-Hoechst,” and against this no objection was raised by Bayer. Moreover, in 1890, the word was incorporated in the new German Pharmacopœia without any protest being made. Whatever germ of a claim might therefore have existed at the beginning has long ceased to be effective. The German Patent Office, having further investigated the rights of the word “phenacetin” claimed by Bayer & Co. in foreign countries, find that in Britain the firm have no exclusive right to the word. Under these circumstances, Messrs. Riedel's claim is admitted, but Bayer & Co. have the right to lodge appeal within a month.

We understand that the citronella-oil arbitration-case, which has been referred back by the Queen's Bench division to the two drug-brokers under circumstances already reported, will be reconsidered by those gentlemen on Tuesday morning next.

The suggested modification in the wording of the arbitration rule in the London produce contracts occupied the attention of the chemical section of the The Chemical Trade and Arbitrations. Chamber of Commerce at its meeting on Tuesday. The matter was brought forward by Mr. Tyrer, who pointed out the unfairness of brokers

assuming the right to alter the wording of the contract, which was practically the only form under which it was possible to carry on wholesale dealings in produce, without the consent of the majority of the entire trade. He alluded to certain notorious recent arbitration cases and the litigation which followed them, and mentioned that there was no doubt that those proceedings were at the bottom of the proposed alteration. He suggested that a general meeting of the chemical-trade section should be called to consider the question in all its bearings. Mr. Bennett (Sir J. B. Lawes & Co.) thought that other sections of the Chamber were still more affected by the proposed change in the chemical trade, and that therefore it might be better to make the meeting a general one instead of limiting it to one trade. Mr. Domeier pointed out that brokers were frequently ignorant of the articles upon which they were appointed to arbitrate, and mentioned that only just recently he had dealings with a broker who for forty years had been constantly concerned in transactions in a certain article, yet he was unable to describe the appearance of that article, and ultimately confessed that he had never seen it. Other speakers called attention to the fact that the London arbitration clause was a great obstacle to foreign trade, and that a movement was now on foot among Hamburg merchants to refuse to accept contracts with that clause. It was ultimately decided to hold an early meeting of the chemical section to consider the question.

ACETANILID.—Quite neglected; the quotations run from 1s. 2½d. to 1s. 4d. per lb.

ACID (ACETIC).—Quiet, at the quotation given in our report of April 23. It is stated, however, that the manufacture of most grades leaves very little profit at present. This is especially the case with the 30-per-cent. acid, which is quoted at 14s. 3d. to 14s. 9d. per cwt., according to quantity. The demand is now beginning to be good, as the season for consumption is approaching.

ACID (CARBOLIC).—The export demand has fallen off considerably, and prices are decidedly lower. Crystals, 39° to 40° C., may be had at 7d.; 34° to 35° C. at 6½d. per lb. Crude 75 per cent. quotes at 2s. 4d., 60 per cent. at 1s. 10½d. per gallon.

ACID (CITRIC).—Steady, at 1s. 2d.—perhaps 1s. 1½d.—per lb.

ACID (OXALIC).—The general quotation remains 3½d. per lb., but we believe some brands are offering at 3½d. per lb. net, free London.

ACID (TARTARIC).—The market is still gaining in firmness. The English makers quote 1s. 3d. per lb., which shows no change; but foreign brands are generally held for 1s. 2½d. per lb. to-day, and it is said that some sales have been made at that figure. A couple of days ago there were still second-hand sellers of foreign acid at 1s. 2d. per lb.

ACONITE.—*Japanese* root unchanged. *German aconite-root* offers at 33s. 6d. to 34s. per cwt.

ALUM offers at 5s. 9d. per cwt. for lump, and 6s. 6d. per cwt. for ground.

ARSENIC.—Best white English powder is getting scarcer every day. The nominal quotation runs from 24s. 6d. to 25s. 6d. per cwt., but it is questionable whether any could be had for immediate delivery.

ASAFOETIDA.—The market remains quiet, although it is said that there have been rather more inquiries lately, and that a small business has been done at improved rates. The importers are unwilling to sell at the recent low quotations.

BALSAMS.—*Balsam of Tolu* is firmly held, importers asking up to 2s. 6d. per lb. for fine old-fashioned quality. Fair *tolu*, without guarantee, has been sold at 2s. per lb. *Canada* is tending easier. *Peru balsam* quiet at 8s. 6d. to 8s. 9d. per lb. *Balsam copaiba* of fine quality scarce and tending higher.

BELLADONNA.—*German* root is now being offered at from 31s. to 32s. per cwt.

BLEACHING-POWDER.—The spot price is 7l. 15s.; *Liverpool* or *Ynch*, 7l., f.o.b.; for export to the Continent, 6l. 10s., f.o.b.

BORAX.—Very sluggish, and tending lower. Crystals are being offered at 18l. per ton.

CAMPHOR (CRUDE).—Much lower. On Monday there were sellers of *Formosa*, to arrive, at 122s. 6d., c.i.f., and of *Japan* at 132s. 6d., c.i.f., but no buyers could be found. On Tuesday night a sale of 100 piculs *Formosa* was made at 114s., c.i.f., for May-July shipment, and although business was also reported on that day at 120s., c.i.f., it is certain that a lower rate (110s., c.i.f., May-July) has since been accepted. At the close there are further sellers at that figure, and at 120s., c.i.f., for *Japan* camphor. It is reported that the shipments from *Japan* during April amounted to 900 piculs only. The *Times* correspondent at Singapore continues to concern himself about the *Formosa* camphor-trade. He wires to his journal on May 5:—"The British camphor-traders of *Formosa* contend that the rights which they have acquired from the aborigines are improperly subjected to vexatious regulation and taxation. They allege that the Japanese policy is purposely inimical to foreigners."

CAMPHOR (REFINED).—In connection with the prospects of this article it is of some interest to recall the relative prices of crude and refined camphor laid down some months ago in the "sliding-scale" established at that time by a new firm of camphor-refiners. That scale is as follows:—

Crude <i>Japan</i> , spot price, 110s. to 115s. per cwt.; ref. bells, 1s. 6¾d. per lb.	
" " 115s. to 120s. " " 1s. 7¾d. "	
" " 120s. to 125s. " " 1s. 8¾d. "	
" " 125s. to 130s. " " 1s. 8¾d. "	

The market is weak and tending easier.

CINCHONA.—Up to the present 1,442 packages of cinchona have been declared for sale at next Tuesday's auctions; nearly the whole of this consists of *East Indian* bark.

COCA-LEAVES have been offering somewhat more freely; fine green *Truxillo* may be had at 1s. 2d. per lb. on the spot.

COCAINE.—Very weak and slow of sale. No change has been made in the convention quotation, but we believe that second-hand holders and outside makers would be glad to listen to offers. It is said that the American market is oversupplied with coca-leaves, and to some extent the weak position of the alkaloid is ascribed to the competition of the recently-introduced substitute.

COCOA-BUTTER.—At the monthly auctions on Tuesday, 600 bags of Cadbury's best cocoa-butter sold at 12½d. to 12¾d. per lb. Four cases ditto, in 3-oz. tablets, at 14d. to 14½d. per lb. The market is extremely firm.

COPPER (SULPHATE).—Steady, but unchanged. *Anchor* brand is quoted at 18l. 15s. per ton, f.o.b., other brands 18l. The *Liverpool* spot quotation is 18l. 15s. to 19l. per ton, f.o.b.; next month offers at 17l. 10s., f.o.b. In 1895 about 15,000 tons of sulphate of copper, nearly all of British manufacture, were imported into Bordeaux.

CREAM OF TARTAR.—Without change, but the tendency is, perhaps, somewhat easier. On the spot, best white French crystals offer at 100s., powder at 102s. to 105s. per cwt., according to brand. To-day's telegraphic quotation from Bordeaux is 94s. per cwt., f.o.b.

CUTTLE-FISH BONE is quoted at higher rates. Several of the parcels recently offering have been taken out of the market, and the demand has been fairly good.

GALLS.—*Chinese* are quiet on the spot at 59s. per cwt. For arrival the market is somewhat easier with sellers at 55s. 9d., c.i.f. *Japanese* galls offer at 53s. 6d. for present shipment. In *Persian* and *Smyrna* galls there is no change.

GLYCERINE.—It would probably still be possible to buy double-distilled s.g. 1.260 from secondhand owners at 65s. per cwt., but there appears to be a generally firmer feeling among holders, principally on account of the upward movement that has taken place in the crude product. In Paris crude glycerine has this week touched the highest point which it has reached since the beginning of the year.

GUM ACACIA.—The market has been extremely quiet since our last. Holders of Soudan gums are generally firm, but no sales could be effected except at very considerable reductions in price. Nominally the quotations for Turkey sorts remain from 85s. for ordinary glassy to 105s. per cwt. for good soft pale sorts. *Gehzireh* is nominally quoted at 54s. to 55s.; *Talca* at 45s. to 47s. 6d. So-called insoluble

Persian gum is held for very high prices—pale selected at from 25s. to 30s., sorts at 17s. to 22s. per cwt.

GUM MASTIC.—In large supply, and quite neglected. Fine pale tear is quoted nominally at 1s. 6d. to 1s. 7d.; yellow ditto at 1s. 3d. per lb.; but holders are anxious to sell.

GUM TRAGACANTH.—Firmly held, but without much business. First white *Bassorah* gum is quoted at 14l. 15s. to 15l. per cwt., seconds at 12l. 10s. to 13l. 15s. per cwt.

HYDROKINONE.—The price for 56-lb. lots of Schering's brand remains at 6s. 6d. per lb., but that of smaller quantities has been raised—28-lb. lots to 6s. 10d., small wholesale lots to 7s. per lb.

IODINE is now again being invoiced by the combination at the old price of 9d. per oz.

IPECACUANHA.—Some of the *Carthagen* root which was bought in at the last auctions has since been sold at the rate of 3s. 11d. per lb. for fair plump, but damaged, showing a rather easier market.

JABORANDI-LEAVES are much more plentiful, but the bulk of the supply still consists of common qualities, for which no buyers can be found. *Pilocarpine* has been pressed for sale somewhat, and might probably be had at easier rates.

LIQUORICE-ROOT.—In moderate supply. Fair decorticated *Persian* at 20s. to 22s.; ordinary rough at 6s. to 8s. per cwt.; good *Russian* decorticated offers at 28s. per cwt., c.i.f. terms.

MENTHOL remains low in price. Sales have been made since the decline at last week's auctions at 9s. 6d. per lb., but it is doubtful whether there would be sellers below 9s. 9d. per lb. now, and several holders ask 10s.; the last c.i.f. quotation was also 10s. per lb.

MORPHIA.—The manufacturers' quotations remain steady at last week's advance; *powder*, in quantities, at 4s. 9d.; *crystals*, at 4s. 11d. per oz. These quotations are for 1,000-oz. lots. *Codeia* unchanged, at 10s. 6d. per oz. for quantities.

MUSK.—Common qualities remain neglected, but the demand for fine grades (as for other perfumery-materials of good quality) has shown signs of improvement lately. Good first-pile *Torquin* pods, thin blue and brown skins, are scarce and firmly held.

OIL (COD-LIVER) still tending lower. Sales of best 1896 non-congealing *Lafoten* oil have been made on the spot at 197s. 6d., a decline of about 5s. on last week's rates, and there are now offers at 195s., c.i.f. terms. *Newfoundland* oil remains comparatively dear, at from 6s. to 6s. 6d. per gallon, according to quality.

OILS (ESSENTIAL).—Good genuine *Sassafras* oil has lately been in better demand; 2s. per lb. is now asked on the spot. *American peppermint* oil is lower; small sales of HGH on the spot are reported at 9s. 1½d., but we believe that that brand may now be had at 9s. per lb. It is even said that 100-case lots for forward delivery offer at 8s. 6d. per lb., usual London terms. *Wayne County* oil in tins is quoted at 6s. 6d. per lb. *Star-anise* oil is slow of sale, and offering at easier prices; 9s. 9d., probably 9s. 6d. per lb. would buy on the spot. *Cassia* oil neglected, at 8s. per lb., nominally for 70-per-cent. to 75-per-cent. quality. *Japanese oil of peppermint* very dull of sale at 6s. to 6s. 3d. per lb. for 40-per-cent., and 4s. 3d. to 4s. 6d. for dementholised on the spot. *Citronella* oil easier at 1s. 5d. per lb. on the spot, perhaps less.

OIL (OLIVE) quiet. A moderate demand exists for eating-oils, which range in price from 3s. 9d. per gallon for ordinary, up to 5s. 6d. per gallon for fine qualities. *Spanish* oils offer at 29l. per ton for good *Malaga*, which is the only variety in good supply. Ordinary *Seville* is quoted at 27l.

OPIUM.—The week has been a very quiet one in this article, but holders are generally extremely firm. Our stock, however, is very small (it is said to be less than 400 cases), and is mostly in very strong hands, so that there are really very few sellers at the current quotations. There is little, if any, opium offering on the spot below 9s. per lb. for fair manufacturing to-day, although yesterday it might have been possible to buy at 8s. 9d. per lb. Some fine soft shipping opium has changed hands at 12s. per lb.

ORRIS.—Very dull of sale at somewhat easier rates;

small *Florentine* for grinding offers at 58s. per cwt., c.i.f.; fine picked at 68s. per cwt., c.i.f., and fair small at 64s. 6d. per cwt., c.i.f.; fair to good quality *Verona* at 50s. to 54s. per cwt. on the spot.

POTASH SALTS.—*Permanganate* continues to be very firmly held, spot supplies being extremely small. The quotation for small crystals in second-hand is 66s. 6d. to 67s. 6d. per cwt. *Chlorate* offers at 4½d.

PHENACETIN.—There has been a very slight demand recently. The quotation of Bayer's brand from the makers still remains 14s. 3d. per lb., but in second-hand this brand can be had considerably below that price. For other brands prices vary down to 5s. 6d. per lb.

QUICKSILVER.—Dull of sale at 6l. 15s. from the importers and 6l. 13s. 6d. in second hand.

QUININE.—There have been rumours of considerable sales this week; transactions of 40,000 to 50,000 oz. second-hand German bulk, for forward delivery up to October, at a price somewhat below 12½d. per oz., being reported. The only business we have been able to confirm, however, is a sale of 5,000 oz. at 12½d. per oz. There are further sellers at that figure, and perhaps at a shade less.

SACCHARIN.—The agents for the Lyons factory quote saccharin 1:500 at 60s. per lb. for 7 to 14-lb. lots; smaller quantities being held up to 63s. per lb., while for larger quantities a concession would be made. 1:300 is quoted by them, according to quantity, at from 36s. to 40s. The German saccharin in moderate wholesale lots is held at about 2s. above these figures. Up to the present it seems that no further steps have been taken in the matter of the threatened legal proceedings.

SAFFRON is decidedly firmer. Prices have generally been raised from 1s. for ordinary up to 2s. for fine *Valencia* by the leading importers, and the view seems to be entertained that we are on the eve of a strong upward movement. Finest *Valencia* is quoted at 27s. to 27s. 6d. per lb.; seconds at 25s. to 26s. per lb.

SALICIN.—There is no change in the quotation at present and manufacturers would still book orders for contracts at the old price. They say, however, that they have had to pay increased rates for their willow bark, and that consequently there is every prospect of an early advance in salicin; the article certainly does not look like going lower.

SARSAPARILLA.—Fair *Mexican* (Vera Cruz) is offering at 3½d., perhaps 3d. per lb., c.i.f. terms.

SCAMMONY.—Best *Turkish* virgin resin has been sold at 30s. per lb. recently; for good seconds 25s. to 26s. per lb. is nominally asked. Small lots of *Skilippe* have been sold at 11s. per lb. *Scammony-root* is firmly held at 55s. to 57s. 6d. per cwt. *English Resin* is held for 9s. 3d. to 9s. 6d. per lb.; Continental may be had at 9s., or a trifle less, from second-hand holders.

SENEGA.—Slow of sale; fair Western root may now be had on the spot at 1s. 1d. per lb., which is the lowest price on record. There are offers from New York at 11½d. per lb., c.i.f. terms.

SHELLAC.—At the end of last week the market remained quiet on the spot with sales of TN *Orange* at 93s. per cwt., cash terms. Early in the week an improvement occurred in the speculative market, and several hundred cases of TN *Orange* sold at 94s. for June, and 95s. 6d. to 96s. for July, delivery. At auction none was offered. For *Garnet AC* 88s. per cwt. is asked on the spot. The market closes quiet, but steady, with sellers of TN, March-May, at 91s. per cwt., c.i.f.

SODA SALTS.—*Caustic soda* is tending slightly firmer, although quotations show no alteration since last week, 76 per cent. being quoted at 9l. 2s. 6d., f.o.b. Tyne; 74 to 76 per cent. at 8l. 10s., f.o.b. Liverpool; 70 per cent. at 7l. 15s. spot, 7l. 10s., f.o.b. Liverpool; 60 per cent. at 6l. 10s., f.o.b. Liverpool. *Crystals* offer at 42s. 6d. ex-ship or wharf London or f.o.b. Tyne, and at 47s. 6d., f.o.b. Liverpool. *Nitrate* quiet: refined, 8s. 2½d. to 8s. 3d.; ordinary, 7s. 10½d. per cwt. *Alkali*, 53 per cent., 67s. 6d. on rail, 70s. f.o.b. Liverpool.

SPICES.—*Zanzibar Cloves* are dull of sale. At auction on Wednesday 60 bales were bought in. Privately there are

sellers for June-August at $2\frac{1}{16}d.$ per lb. *Black pepper* is lower; Singapore sold at auction at $2\frac{3}{4}d.$ to $2\frac{1}{4}d.$ per lb for fair washed. For arrival the market is also easier. Fine *White Singapore pepper* realised $5\frac{1}{2}d.$ per lb. at auction. Privately $3d.$ per lb. has been accepted for Penang. *Pimento* *ste ady* at $2\frac{3}{4}d.$ to $2\frac{1}{2}d.$ per lb. for ordinary to good. *Nutmegs* are from $1d.$ to $2d.$ per lb. lower for good quality. *Mace* quiet and easier at $2s. 10d.$ per lb. for fine W.I. *Chillies* in demand at firmer rates. Medium red Zanzibar brought $34s. 6d.$ to $35s.$ per cwt. at auction; fine bright Japan realised $59s. 6d.$ to $62s.$ per cwt. The demand for *Jamaican Ginger* remains good. The bulk offered at auction sold at an advance of fully $2s.$ per lb. on common kinds, while medium qualities are rather easier: fair to good quality realised $102s. 6d.$ to $110s.$ per cwt.; medium washed, $82s. 6d.$ to $90s. 6d.$; common dark to ordinary dull, $58s.$ to $79s.$ per cwt.; and medium native cut, $32s.$ to $32s. 6d.$ for fair rough washed.

STAR-ANISE.—Rather firmer. The general asking-price on the spot is $97s. 6d.$, while for arrival the quotation is as high as $104s.$ c.i.f.

SUGAR OF MILK.—Rather easier. American or Continental white powder, guaranteed pure, offers at $70s.$ per cwt., on the spot.

TAMARINDS.—A very easy market. At auction on Wednesday, 124 packages of new Barbados were bought in at nominal prices; while of 57 packages new Antigua, 7 barrels sold at the low rate of $14s.$ per cwt. The new crop is said to be very large.

TEA.—The boom in Indian teas has been continued this week, with the result of a quotation of $9\frac{1}{16}d.$ for spot, and very high prices for leaf-teas in the one sale of the week, on Wednesday. The terminal quotation referred to is due to the fact that a few operators have taken advantage of the scarcity of good medium Assam to effect something rather like a corner; and a few rash individuals, who have sold short, are liable to pay heavy differences. Ceylons, on Tuesday, went at full prices, practically only rubbish in leaf-tea selling under $6d.$; but the position of Ceylons is not nearly so strong as that of Assams, and the April and May shipments of Ceylon tea from the other side will prove very heavy, and may depress the Indian market, which appears to have gone quite far enough, if not a little too far.

TURMERIC.—Fairly steady, at $8s. 6d.$ to $9s.$ for good Madras finger, and $7s. 6d.$ to $8s.$ per cwt. for fair Bengal. Small sales are reported at those figures.

VERATRIN is very scarce and higher at $6s. 6d.$ to $6s. 9d.$ per oz, according to quantity.

VERMILION.—Chinese keeps firm, and further sales of small quantities of Wingkat are reported at $2s. 7d.$ per lb., on the spot.

WAX (JAPAN).—Fairly steady at $37s.$, perhaps $36s. 6d.$, per cwt., on the spot, for good pale squares. The quotation for arrival is $34s.$ per cwt., c.i.f.

Heavy Chemicals.

Heavy chemicals, on the whole, continue quiet, but with a somewhat fuller inquiry for export. Shipments to Australia, Italy and Spain are on the increase, but to Russia and the East they show a decline. Reports from the Tyne are better, but those from the Clyde state that there is a scarcity of new business, notwithstanding the fact that general navigation has re-opened. There is a decided improvement in *Sulphate of ammonia*: quotations for May-June are $8l. 7s. 6d.$, and July-August $8l. 10s.$; whilst for prompt Beckton terms stand $8l. 2s. 6d.$, Hull and Leith $8l. 1s. 3d.$ to $8l. 2s. 6d.$, London $8l. 2s. 6d.$. *Sulphate of copper* remains firm. *Bleaching powder* in fair request. *Caustic soda* meets with rather better demand, and fair business is passing. *Soda crystals* quiet. *Chlorates* of potash and soda unchanged. *South Durham salt* firm at recent rates, and good shipments are reported. The demand for recovered *Sulphur* continues strong, and the article is rather scarce. Brown *Acetate of lime* very dull, with lowering tendency in price. Yellow prussiate of *Potash* easy. *Sal ammoniac*, first and second qualities, quiet. *Borax* neglected, and very weak. The Convention prices for crystal and powder still remain at $20l.$ and $21l.$ respectively, but $18l.$ and $19l.$ have been

accepted. Green *Copperas*, best Lancashire and Welsh, in strong request. *Naphthas* unchanged.

The Liverpool Drug-market.

Our Liverpool correspondent, writing on May 6 says that second-hand holders of *Gum acacia* show more inclination to give way, but inquiries from consumers have become more limited since prices advanced to such a high level, and the sales passing are in trifling lots. A moderate supply of *Brazilian gum* has been offered and partly sold at an advance on late rates. *African ginger* has been arriving freely, and the slight stiffness shown during the past week or two has been lost; sellers would now take $20s.$ per cwt., or even a shade less, for good root. A parcel of the *small leaf Jaborandi* sold readily at auction at $2s. 1d.$ per lb., but the ordinary grades are being neglected. *Castor oil* is steady at $2\frac{3}{4}d.$ per lb. for good seconds *Calcutta*, and considerable sales have been effected at this price; first pressure *French* is held for $2\frac{5}{16}d.$ to $2\frac{3}{4}d.$, and second *Madras* at the same figure. The business in *African chillies* has been very animated, and large sales have been made at prices ranging from $22s. 6d.$ for common to $35s.$ per cwt. for fine; some choice are held for $40s.$ *Kola nuts*, notwithstanding arrivals, continue to find ready buyers at the late rates, with a firmer tendency. One parcel *Calabar beans* has changed hands at $1\frac{1}{4}d.$ per lb., being the first movement for some little time.

The Hamburg Drug-market.

Our Hamburg correspondent writes, on May 5:—"Business has continued very quiet since last week, and there has not been much doing in our drug-market. *Arsenic* remains unchanged. *Acid tartaric* continues firm at $236m.$ to $295m.$ per 100 kilos. *Acid citric* is also firm; pure quality held for $265m.$ to $275m.$ per 100 kilos. *Camphor (refined)* is very dull, and can be bought now at $340m.$ per 100 kilos; probably a little less would be accepted. *Cantharides* are quite unchanged; prime Russian at $430m.$ per 100 kilos. *Balsam copaiba* is decidedly firmer; holders ask from $310m.$ to $360m.$ for best quality. *Balsam Peru* is also much firmer, and held at $17m.$ to $17\frac{1}{2}m.$ per kilo. *Cascara sagrada* unchanged, at $42m.$ per 100 kilos. *Chlorate of potash* steady, at $86m.$ to $86\frac{1}{2}m.$ per 100 kilos. *Cream of tartar* in good demand; prices are firm at $210m.$ to $225m.$ per 100 kilos. *Glycerine* shows a better demand, and is firm at last week's prices. *Galangal* very firm; good quality very scarce; to-day's quotations are $50m.$ to $55m.$ per 100 kilos. *Acacia gum* continues firm, but does not show much animation at the present high prices. *Menthol* is very dull, especially for forward delivery, which is offering at $22\frac{1}{2}m.$ per kilo., while for spot $29m.$ is asked. *Peppermint oil* is quiet; HGH is quoted at $9m.$ to $8.75m.$ per lo. *Japanese oil* dull at $10m.$ per kilo. *Citronella oil* is very quiet, and can be bought to day at $350m.$ per kilo. *Star anise oil* shows a better demand at higher prices; to-day's quotation is $21m.$ per kilo. *Oil (cod-liver)* is easier, and favours buyers; 1895 as well as 1896 non-congealing oil is offering from $195m.$ to $200m.$ per barrel. *Styrax* shows an upward tendency, at $140m.$ to $145m.$ per 100 kilos. *Cardamom-seeds* are scarce and firm, at $710m.$ per 100 kilos. *Honey* is quiet; Valparaiso is offering from England at $4350m.$ per 100 kilos. without tempting buyers.

The Amsterdam Market.

Our Amsterdam correspondent writes on May 5 that 60 tons of Van Houten's best cocoa-butter were sold that day by auction with good competition at extremely firm rates, prices averaging $70.58c.$ per half-kilo. Details concerning last week's Amsterdam cinchona-auctions show that the richest parcel of bark offered in sale was one of 11 bales crushed *Ledgeriana*, analysing 10.83 per cent. of sulphate of quinine. It realised $40\frac{3}{4}c.$ per half-kilo. The principal feature of the sales was the excellent demand for fine druggists' quills, for which higher rates were readily bid than have been known for a long time. Good broken quills and root were also well competed for; ordinary and medium quality, on the other hand, was quite neglected. The Java cinchona-shipments during April have been as follows:—

	1896	1895	1894	1893
April—				
Amsterdam lbs. ..	419,000	615,000	515,000	619,300
January 1 to April 30—	2,492,000	2,477,000	2,383,000	2,530,000



Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views as concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications, with, if desired, a distinctive nom-de-plume.

The Testing of Lemon oil.

SIR,—The letter from Mr Umney with reference to the determination of citral in lemon-oil calls for some reply from me, although as yet my experiments have not enabled me to clear up all the points raised. The questions at issue appear to be—First, does lemon oil contain bodies of an "alcoholiform" character—i.e. capable of fixing the acetyl-group when acetylated in the usual way (before reduction); and, secondly, is citral capable of reduction to its corresponding alcohol (geraniol) and estimation by conversion of that alcohol into its acetic ester? If the first were true it would necessitate some such correction as Mr. Umney suggests, though I know of no evidence of the existence of such bodies in the work already done on lemon oil. In some preliminary experiments made with a view to answering this question I have been able to confirm Mr. Umney's statement that a certain amount of alkali-absorbing bodies is formed on acetylation only of lemon-oil; and further experiments made with a solution of pure citral in limonene led to the interesting observation that on acetylating such a solution and well washing the resulting oil, a saponification with standard alkali showed an absorption of alkali (approximately) equal to one molecular equivalent of acetic acid for each molecule of citral taken. In order to ascertain if a new acid or anhydride was formed, as in Perkin's synthesis (although this seemed on the face of it improbable on account of the perfect neutrality of the oil before saponification), the potassium salt formed was examined as follows:—Sulphuric acid was added in excess, with some silver sulphate to get rid of chloride, and the volatile acid distilled with steam till the distillate was no longer acid. The distillate was converted into the sodium salt, which gave all the reactions of acetate, though a small quantity of an oily acid appeared to be present; to make certain it was converted into the silver salts and the latter analysed—it contained 62.57 per cent. of silver. Silver acetate contains 64.67 per cent. It would appear, then, that in some way or other, possibly by first undergoing some isomeric change, citral has the property of combining with the acetyl-group. I hope to ascertain the exact nature of the change which occurs, as well as the behaviour of the aldehyde citronellal under similar conditions. I am much indebted to Mr. Umney for placing at my disposal the facts and figures he has already obtained.

As to the second point, there is no doubt that geraniol can be quantitatively estimated by means of its acetic ester. As to whether it is formed quantitatively on reduction of citral with sodium, I had relied on published statements (see references in my paper), merely endeavouring to check results by quantitative experiments with known amounts of citral, the amount of alcohol formed on reduction being determined as stated. Even if the figures I have obtained are not absolutely true, there seems no reason to doubt that the process gives useful and, at least, comparative results.

It is greatly to be regretted if, as Mr. Umney suspects, recent chemical discoveries have in this case only been the means of enabling unscrupulous dealers to sophisticate inferior oils, so as to bring them up to a high "citral value." If true, it only emphasises the necessity of a complete physical as well as chemical examination of the oil.

Yours truly,

Malden Crescent, N.W., May 5.

H. GARNETT.

Malt Extract.

SIR.—In regard to Mr. Conroy's remarks respecting diastase in malt extracts, we may say that we advocate a standard test for malt extract, and consider Lintner's method with Fehling's solution the most accurate for determining the diastatic activity. No doubt Mr. Conroy agrees with us, but uses potato-starch or arrowroot for the sake of quickness. There is no safeguard to the public if makers state, "Made from malt only," since inferior cheap malt, as well as malt of a particular class, contains little or no diastase. Special sound malt is required, and the barley must be selected and malted in a special way in order to produce malt extract that will keep unimpaired. There are good malt extracts in the market, but, with suitable malt at 35s. per quarter, it is impossible to sell genuine malt extract containing a beneficial percentage of diastase at 26s. per cwt. The price condemns such extract at once. Extract made from maize, wrongly called malt extract, could be sold at this price and yield a very handsome profit, since maize costs only 14s. per quarter, and gives a larger quantity of extract than malt. Maize extract would contain no diastase, and a pennyworth of treacle, therapeutically, would be just as efficacious, unless men do gather grapes of thorns and figs of thistles nowadays. Let us fix a standard in the interest of all.

Yours faithfully,

ENGLISH DIASTASIC MALT EXTRACT COMPANY (LIMITED),
Mistley, May 2. Per J. E. J. Johnson, F.I.C., F.C.S.

Sticky Fly-papers.

SIR,—I notice in this week's issue of *THE CHEMIST AND DRUGGIST* that you understand Messrs. Tanbridge & Wright, of Reading, were the first folks to make "sticky" fly-papers, and that they first started to manufacture them about seven years ago. So that you might be correct, and I also thought it might interest you to know, that when the history of sticky fly-papers comes to be written—if written it is—that unless someone can claim the making of them at an earlier date, my father, Mr. Joseph Oglesby, chemist, 31 Micklegate, York, who made them over thirty years ago, is the inventor, and it came about in this way:—The late Mr. John Holliday, who owned and kept the York Station Hotel, also the North Eastern Hotel, two of the largest in the ancient city, grumbled to my father one day that flies and buzzers indulging on arsenic fly-papers often fell dead in the soup and other dainties that were being prepared in the kitchens for the guests upstairs, which, of course, went against his idea of how food should be presented to his customers. "Cannot you make something that holds them?" said he; and the result was a concoction of Raimes's birdlime and treacle, which, after being prepared, was spread when warm on glazed brown cap-paper, 15×9, having a clear margin of about 1 inch all round. These were then stuck face to face and sent out in one-dozen lots, and I am told they are sold to this day, in that primitive way, to folks who contend there is nothing like them, not even excepting the "Fly-cemetery." Mr. W. H. Hammond, chemist, Caroline Street, Hull, who for years assisted my father to make and sell such sticky fly-papers, will be glad to corroborate all I have said.

Yours respectfully,

Barnsley, May 2.

ARTHUR OGLESBY.

[We did not say that Messrs. Tanbridge & Wright were the first to make sticky fly-papers. We could not say that with the knowledge that the "catch 'em alive, oh!" cry was a familiar one in London in the eighteenth century, and the composition has formed the subject of many notes in this journal for twenty years or more. One from the 1879 *DIARY* may be quoted, although the quantities in it have gone wrong:—"Melt together 4 oz of rosin with 1 oz. of linseed oil, and add 1 oz. of honey. Stir well and spread on paper, which must be previously steeped in alum to prevent the 'glue' soaking through." The use of parchment-paper, and putting the papers up for retail by chemists, are the points which Messrs. Tanbridge & Wright claim to have made.—ED. C. & D.]

Anti-cutting.

SIR,—Mr. Glyn-Jones says that $4\frac{1}{2}d.$ is an absurd profit to charge upon an article which cost $2d.$ and has only to be

handed over the counter. The less said about the remark relative to the barber the better, so far as the dignity of Mr. Glyn-Jones as a chemist goes.

I don't know about $4\frac{1}{2}d.$ being so large a profit upon a put-up article selling at $1s. 1\frac{1}{2}d.$ I find that a draper sells a tie which costs $8d.$ at $1s.$, and that is a put-up article; a fancy-goods dealer sells a purse which costs $8d.$ at $1s.$, and that is a put-up article; an ironmonger sells a knife, or a pair of scissors, which cost $8d.$ at $1s.$, and these are put-up articles. Why should a chemist sell at a smaller percentage of profit than these?

Then there is this view of the case. A chemist is a man who has to be specially qualified for the discharge of the duties connected with a very limited business, and every patent sold, even if it is put-up, takes so much off the business in the concrete. In other words, if the article were not put up, the chemist would have to put something up in its place which would pay him better. Having complied with the educational demands of the State, he is fairly entitled to the drug-business, and if manufacturers will put-up nearly everything which the public want in the shape of drugs, they have no right to expect chemists to sell their articles upon a small profit.

It is said that chemists are not asked to make terms, but they are asked to join this movement, and they have a right to state upon what terms they will do so. It is recognised that it cannot succeed unless chemists take it up.

I have communications from various parts of the country, which lead me to think that chemists are not so apathetic as manufacturers would have us suppose. It is not to be wondered at if chemists have bitter feelings to both manufacturer and cutter, and as a result show little anxiety to join hands with either for any purpose.

Besides, it is too late in the day for manufacturers to tell us that they are moving in the interests of chemists. During all these years they have seen honest, hardworking chemists turned out upon the streets with their wives and little ones, mainly through the agency of their nostrums. They have seen the drug-business degraded and ruined by so-called cutting-places, which never could have existed but for these put-up nostrums, and yet their hearts were never moved with pity until they began to find that the cutter was cutting themselves. The cutter, upon the other hand, in trying to ruin the chemist, reduced prices to a stage at which he could not live himself. Now both these want the assistance of the chemist, in order that they may be lifted out of a ditch they themselves digged, the one wishing that it might bury the chemist, and the other not caring whether it did or not.

Is it to be expected that chemists will forget all these things in a day, and rush to combine with grocers and stores because manufacturers and cutters wish them to do so?

If they wish chemists to seriously consider the position, let manufacturers first resolve to stop supplies entirely, and, without exception, to all who sell under a fixed price. Let that price be the advertised price of the article. Let the article be supplied to the retailer at a price which will allow him 30 per cent. clear profit. That is quite an ordinary profit in general business. If these steps are taken, I believe chemists will gradually support the movement as bitter feelings are toned down and oppression is relieved; but I don't believe chemists will ever recognise grocers or stores in any combination, nor is it desirable for the dignity of the profession that they should do so.

Dumfries.

JAMES REID.

[We like all views to be expressed in our correspondence columns, and Mr Reid expounds one side so trenchantly that we gladly pay attention to what he says. But we must disclaim any sympathy with his apparent suggestion of bad faith on the part of the promoters of the Proprietary Articles Trade Association. Whether they are mistaken or not in their policy, it is at least obvious that they are giving themselves a great deal of trouble to remedy a universally recognised evil in the trade. Mr. Reid's insinuation that the business is being worked by manufacturers who are trying to cajole chemists into selling their articles is, unfortunately, quite inaccurate. If it were the case, the prospects of the Association would be much more rosy than they are. Manufacturers are looking on the movement with some curiosity, but at present, we are sorry to say, they do not show signs of much enthusiasm in its favour.—ED. C. & D.]

SIR,—There is one point in all the anti-cutting schemes which I have not seen mentioned: agreements provide that no person is to sell below a certain price. This evidently was drawn to apply to chemists, and not to stores or limited companies paying dividends. Take, for instance, Elliman's embrocation, which may not be sold under $1s.$ Boots (Limited) ordinary dividend last time was, I believe, 10 per cent.; hence the customers of Boots (Limited) buy Elliman's embrocation at the same price as at the chemist's and get 10 per cent. dividend besides. This puts the chemist at a disadvantage. Are Boots and other companies breaking the agreement or not?

Yours truly,
PERPLEXED. (72/12)

[The point is hardly worth raising in regard to a company such as Boots, where not one customer in a thousand is a shareholder. But it is more appropriate in connection with the true co-operative stores where all the customers share in the profits. From our report of the Edinburgh meeting this week it will be seen that the question is being considered. We do not ourselves see that there is anything to be remedied. A member of a co-operative store who buys Elliman's embrocation at $1s.$ and subsequently gets his infinitesimal share in the profit on the transaction, is only in the position of a chemist who may use the embrocation in his own household, only less so.—ED. C. & D.]

Who Sold the Strychnine?

Mr. S. McKinney, pharmaceutical chemist, Cookstown, co. Tyrone, Ireland, writes to say that for some time past meat poisoned with strychnine has been continuously laid in the streets of Cookstown, and a number of valuable dogs have been destroyed. There is also, of course, great risk to the public safety, and the inhabitants are naturally alarmed. After careful local inquiry the police have come to the conclusion that the poison must have been procured from a distance. If any chemist could give information which might lead the authorities to the discovery of the criminal, either to Mr. McKinney or to the Head Constable at Cookstown, he would do a useful service, and would be suitably rewarded.

MISCELLANEOUS INQUIRIES.

Back numbers containing formulae, educational or other specific information can be obtained from the Publisher.

N.B.—All queries should be accompanied by the business card of a subscriber, or the address label from THE CHEMIST AND DRUGGIST wrapper. We destroy anonymous letters. We do not answer queries of the kind here dealt with by post. We ask that separate queries shall be written on separate sheets of paper.

60/62. *Buchu*.—Eczema-ointment, which has been very effectual in the case of a boy who had an outbreak of eczema on the face. This we find to be lanoline cold-cream.

57/9. *Inquirer* sends us a sample of Indigestion-mixture which has been very effectual in relieving a schoolmistress of indigestion and worry. It contains an excess of bicarbonate of soda beyond what the liquid can dissolve, and we think the following recipe will make something like it:—

Solli bicarb.	..	..	..	..	5x.
Ammon. chlorid.	..	..	..	..	5iv.
Tr. gentian. co.	..	..	..	..	5j.
Inf. aurant. conc.	..	..	..	..	5j.
Aq. ad	..	..	..	..	5viij.

M.

Dose: a dessertspoonful in half a teacupful of water thrice daily an hour after meals.

It is curious that doctors have recently taken a renewed fancy to chloride of ammonia as a remedy for nervous affections. In the case of the above mixture some interaction takes place, with the result that a small percentage of free ammonia is found in the mixture.

60/33. *Brist.*—Hand cameras retailing at from 40s. to 50s. each do not have all the best improvements, and generally no focussing arrangement, but at the lower price the Blackfriars Photographic Company and Barclay & Sons (Limited) offer good instruments. You should also communicate with the Eastman Photographic Materials Company, who make some excellent hand-cameras for use both with film and dry plate, and for the holiday season you could push their guinea pocket kodak, which is the nicest and most useful thing going.

61/33. *Röntgenograph*—(1) The chemicals used for the Cryptoscope are not combined, and are used mixed with water and mucilage. The best information on the subject is contained in a paper by Mr. H. Jackson, communicated to the Chemical Society, of which a report appeared in this journal on March 14, page 377, where you will find the information you desire. (2) We presume that barium platino-cyanide would be regarded as a metallic cyanide, and, therefore, subject to the provisions for the sale of poisons.

60/2. *Mizpah.*—(1) Oil of citronella is generally used for covering the odour of turpentine. (2) Resin is the only thing for thickening methylated spirit.

59/70. *C. R.* (Schaffhausen).—A mixture of beeswax 1 part in 2 parts of oil of turpentine makes the best Linoleum reviver. See *C. & D. DIARY*, page 225.

59/80. *W. S.*—We have submitted the copy of the prescription to the pharmacist at the hospital where it was written, and he confesses his inability to read it. Perhaps it is ung. Pagenstaecher.

56/20. *Polish.*—Nankin-brown is a kind of Bismarck-brown dye, and you may use the latter instead of it.

57/42. *Assistant*—We have never found anything better for Red Hands than a long spell of idleness. When that cannot be got, the person who owns the hands should protect them as much as possible from dirt, wash them frequently with plain soap, and rub them the last thing at night with lanoline cream. See a note on the subject in the 1894 *DIARY*, page 366.

57/41. *Belladonna.*—Your pigment of belladonna seems to be Colloodium Belladonnæ. There is a formula for it in the B.P.C. Formulary, but it does not work well. Wright's modification is best. You will find full directions for preparing it in the *C. & D.*, August 19, 1893, page 285—they are too long to quote. The preparation was originally made by Messrs. T. & H. Smith, and is now obtainable from most wholesale houses.

56/67. *Cortex.*—(1) We cannot say how Oidtmann's purgative injection is made. It is a proprietary preparation. (2) Dry-cleaners use turpentine, benzine, petroleum ether, solution of ammonia, magnesia, and other materials in their work. The word "dry" really means that they do not wash the goods.

58/46. *Wilts.*—We imagine that the man who died from sulphonal-poisoning took several drachms of it, for in medicinal doses of 3ss. or thereabouts it is a perfectly safe drug, and you need have no fear about it. The chief danger is accumulation, but this is not likely to happen with dipsonians, who are frequently subject to diarrhoea. Yes, you have used "Wilts" as a *nom-de-plume* for a long time, and it is too bad of another Wiltshire man to filch your good name.

60/69. *Delta.*—Brown boot Polish.—Your polish is not a good one. See the formula given in the *DIARY*.

QUERIES similar to those submitted by the following correspondents have been answered in the current volume, and they are requested to consult the numbers, or to send 4d. to the publisher, stating their requirements, when duplicate copies will be sent to them:—55/56 (*Nil Desperand.*), 61/7 (*Slough*), 60/6 (*Junior*), and 61/63 (*Ceney*).

61/8. *Lignum Junior.*—(1) Syrups are stocked by wholesale houses in tapped earthenware jars, barrels, or slate vats. A 10 gallon jar, with tap at the base, would suit your purpose best. Messrs. Price, Sons & Co., Bristol, can supply you. (2) If you have a liquid which you think is ipecacuanha-wine, the odour and taste will tell you whether it is made with sherry or not. Put a few drops of Mayer's solution in a little of it, and you will get a precipitate if there is an alkaloid in it. Should that be so, evaporate a drachm or two to half its bulk, filter through animal charcoal, and mix 5 drops of the filtrate with 10 drops of acid. hydrochlor dil. and a tiny bit of chlorinated lime. If there is emetine in the preparation it will show itself by an orange coloration, with reddish fluorescence. Finally, you may swallow an ounce or two, and indulge in solitary contemplation for a quarter of an hour.

44/44. *A. R. Osborne.*—If you use the same quantity of potass. metasulphite, instead of sodium sulphite, in the formula for Dry Developer (*C. & D.*, March 21, 1896, page 436), you will have no difficulty in keeping it.

58 63. *F. H. W.*—We cannot give you the information at the moment, but we hope to get it shortly.

55/42. *J. G.*—Waterproofing Cloth.—We should say that the use of baths of lead acetate and alum is followed by the deposition of lead sulphate in the interstices of the fabric, although Reimann, who devised the process, states that the sulphate is deposited in the fibre. At all events, it is upon this deposition that the inventor bases the waterproof property of the cloth. Others have adopted the same materials with modifications in their use. In one of these a soap is made by saponifying 2 parts of tallow and 1 part of yellow resin with soda, and adding to the lye a tenth part each of glue and linseed oil, continuing to boil for half an hour. The fabric to be waterproofed is steeped for twenty-four hours in a mixture of 1 oz. of this soap with 2 gallons of water. Then a solution is made, 1 lb. of aluminium sulphate and $\frac{1}{2}$ lb. lead acetate in 8 gallons of water, the clear liquor being drawn off after the precipitate of lead sulphate settles. The fabric is then steeped in the clear liquor, whereby a waterproof aluminium soap is formed, with a certain small proportion of lead sulphate and soap with it, owing to the solvent action of aluminium acetate upon the heavy sulphate. This process is really more practicable than the simple lead-sulphate one.

54/16. *W. N.*—We have given recently several formulae for self-digestive Food for Infants. We always take the term "self-digestive" to be a relative term, as food fully digested is abhorrent in taste and smell. So far as farinaceous foods are concerned, the degree of digestion to which the flour is carried is not by any means excessive. Ordinary wheaten flour is simply cooked by steaming for four hours, or tying it in a cotton bag and boiling in water for four to six hours. The effect of this cooking is to break down the cell-walls of the wheat and partially tumefy the starch, with, of course, a certain degree of digestion. All that now remains to be done is to dry the cooked flour, powder, and sift it. In this condition it is a commercial article, although we know some chemists prefer to make it themselves. No more digestion of the flour is required, all that is needed being to mix with every 12 parts of it 1 part of powdered malt extract and 2 parts of powdered milk-sugar, with the addition of sodii bicarb. 5iss. to each pound of the combined materials.

58/90. *W. C.*—Essence of Grenadine.—This is a preparation of pomegranate-fruit, which is best made by allow-

ing the juice of the fresh fruit to ferment, aiding fermentation by a small quantity of German yeast. After forty-eight hours add 15 per cent. of rectified spirit, and set aside for a month to clarify.

64/19. *E. M. F.*, being an aërated-water manufacturer, thinks of utilising the spare power of gas-engine for the purpose of charging "accumulators" while the engine is running during the day. He wishes to get (1) some idea as to the probable cost for upkeep per annum of a set of accumulators sufficient for an installation of fifty incandescent lights; (2) having the power at hand, would Electric Lighting compare favourably with gas at 5s. per 1,000 feet? [The number of accumulators depends upon the voltage of the lamps. For 50-volt lamps about twenty-seven cells would be necessary; for 100-volt lamps about fifty-four cells. By voltage of lamps is meant the electrical pressure at which they are destined to work, not their candle-power. The size of the accumulator-cells depends on the number of lamps and their candle-power, and on the length of time they are required to light the lamps with one charge. To fully answer your queries it would be necessary to know (1) actual amount of spare power; (2) candle-power (eight or sixteen) and voltage of lamps; (3) if lamps would be used in daytime, and what average number would be used at night; but failing this information, we assume that your spare power is sufficient, that 50-volt sixteen-candle power lamps will be used, that cells will be charged up every day, and that lamps will be chiefly used at night, not more than one-half being on at any one time. The cost of twenty-seven cells (L. 15, B.P.S. type), at 2l. 11s. per cell, is 68l. 17s.; of the dynamo and accessories, say, 35l.; and of putting down plant, wiring, switches, fittings, &c., say, 100l.; total, say, 200l. With good and careful management, especially as regards the accumulators, the cost of upkeep should not much exceed 5 per cent., or, say, about 10l. per annum. The horse-power necessary to drive the dynamo would be about 3½, but if eight-candle power lamps are used, this figure, as well as the cost of cells and dynamo, would be considerably reduced. There is little doubt that you would find the electric light economical, with gas as high as 5s. per 1,000 cubic feet.]

52/35. *Okettolsery* sends us two specimens of British plants of which he asks the names, at the same time making a wild shot at one of them, which shows that his botany is very much at fault. This identical specimen, he tells us, he found "in a hedge in North Devon," and supposes it to be *sabadilla* (*Asagraea officinalis*, or, as it is now known, *Schœnocaule officinale*), at the same time rightly remarking that *sabadilla* is indigenous in North America. The supposed *sabadilla* is none other than green hellebore (*Helleborus viridis*), a Ranunculaceous plant, found in woods and hedges in the south and east of England, growing chiefly on the chalk. Its well-known green flowers open during the months of March and April. A curious fact related of this plant is that in certain seasons and under favourable circumstances its growth is more luxuriant than in others; for instance, it has been noted that in one locality where the plant was abundant one season little or none of it appeared the next, though, so far as known, the ground had not been disturbed. On the other hand, where the plant had been purposely uprooted, in consequence of cattle grazing in the neighbourhood, in two years it sprang up in such abundance as to cause much mischief to the cattle. The plant is a near ally to the sinking hellebore, or bear's foot (*Helleborus fatidus*), also a British species, and to the Christmas rose (*H. niger*), as well as to the black hellebore of the ancients, which is considered to be identical with *H. orientalis*, Lam., a native of Greece and Asia Minor, which, according to Pliny, was used as a purgative in mania by Melampus 1,400 years B.C. *H. viridis*, the plant mistaken by our correspondent for *sabadilla*, is occasionally used as a substitute for black hellebore of commerce. The roots of all the species are powerfully acid, narcotic, and cathartic. How any of the species of *Helleborus* can be mistaken for *Asagraea* it is difficult to understand, as the latter is a monocotyledonous genus, belonging to the colchicum family and is a bulbous plant with long-linear, grasslike leaves. The second plant sent to us is a not uncommon species of

Malva, but withal a plant of some interest—namely, the musk mallow (*Malva moschata*). It is a perennial, and is found in hedges and on roadsides in this country, as well as in many parts of Europe. Its common and specific names are derived from the musky odour which is given off from all parts of the plant when kept in a close situation. So far as we are aware, it has never been put to any actual use. We ought to add, for the benefit of other young botanists, that the identification of their specimens is a matter which is not of general interest, and we are inclined to believe that such assistance as we can give them will rather do harm than good. They can no more learn botany without practice, than chemistry without analysis. We have used "*Okettolsery's*" specimens as examples of information which collectors can find out for themselves.

68/31. *H. S. J.* has been asked by a medical man why it is that Squire states that the strength of Spt. Gaultheria is 5 per cent. and the dose of the oil 10 to 15 minims; that Martindale gives the dose of the oil as 10 minims; and Remington the strength of the spirit as 3 per cent. and the dose of the same 10 to 20 minims. All this looks conflicting, but is not. An old edition of Remington is quoted from, when the strength of the spirit was correctly stated; but since then the U.S.P. has changed that strength to 5 per cent. The dose of the spirit is Remington's own information, and refers to the use of the preparation as an antispasmodic. The oil is given as an antirheumatic, &c., and the dose is substantially based upon its content of methylsalicylate.

67/55. *Potassium*.—(1) We cannot find anything in books about *Mistura Mirabilis*; perhaps some subscriber may be able to give us the formula. (2) In regard to photographic chemicals, see the DIARY, page 391.

59/68. *Boric* sends a sample of Frigeline which is used by butchers for sprinkling over meat, and sells at 1s. per lb. "*Boric*" thinks it contains borax and boric acid, but wants to know the proportions and how the powder is obtained in such a nice, dry, granular state. The proportions are about 4 parts of borax and 1 part of boric acid. These should be mixed together, placed in a cellar for about a day until the mixture is pasty, then dried carefully and passed through a sieve of the requisite fineness—about No. 60.

60/11. *Carl*—Your Starch Gloss is a mixture of borax (4 parts) and starch (1 part).

INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, postcard replies to the following:—

73/27. Makers of glazed pots with covers, similar to those in which Bovril is put up.

Next Week.

Tuesday, May 12

Royal Photographic Society, 12 Hanover Square, W., at 8 P.M. "Dryplates for Röntgen-ray Photography," by H. Snowden Ward. "Notes on the Pyro-developed Image," by Alfred Watkins. "A New Stripping-film for Negative Work." By J. B. B. Wellington.
Royal Institution of Great Britain, at 3 P.M. Mr. O. Vernon Boys on "Ripples in Air and on Water."

Thursday, May 14.

Royal Institution of Great Britain, at 3 P.M. Mr. W. Gowland on "The Art of Working Metals in Japan."

Friday, May 15.

Royal Institution of Great Britain, at 9 P.M. Mr. Alexander Siemens on "Cable-laying on the Amazon River" (with illustrations).